

Grad Lib. -Ref

Z

7991

Z87

v. 98

t.p. i.

THE ZOOLOGICAL RECORD

Z

E. B.

L. G.

R. W.

G. P.

THE
ZOOLOGICAL RECORD

VOLUME 98

RECORDS OF ZOOLOGICAL LITERATURE

RELATING CHIEFLY TO THE YEAR

1961

COMPILED FOR THE ZOOLOGICAL SOCIETY OF LONDON BY

E. BROWNING, S. E. BUNNEY, D. B. CARLISLE, A. M. CLARK, P. CURDS, M. A. EDWARDS,
L. G. ELLIS, A. G. C. GRANDISON, J. P. HARDING, A. B. HASTINGS, †R. S. J. HAWES, J. E. HILL,
R. W. INGLE, A. I. IVANOV, J. O. MALCOLM, S. MARKOWSKI, R. A. NEAL, E. F. OWEN,
G. PALMER, S. PRUDHOE, A. E. SALISBURY, R. W. SIMS, J. T. TEMPLE, W. P. C. TENISON,
H. DIGHTON THOMAS, S. WARE, E. I. WHITE,

AND THE COMMONWEALTH INSTITUTE OF ENTOMOLOGY.

EDITED BY

H. GWYNNE VEVERS, M.B.E., D.Phil., Sec.L.S.

ASSISTANT EDITOR

MARCIA A. EDWARDS, B.Sc.

Explore solum : sic fit via certior ultra

LONDON :

PUBLISHED BY

THE ZOOLOGICAL SOCIETY OF LONDON

PREFACE

SINCE the publication of the last volume, the Editor, Mr G. B. Stratton, has retired. Mr Stratton was associated with the *Record* for very many years and became Editor in 1952. We would like to express our thanks for his diligence which ensured that a volume of the *Record* was published annually despite many difficulties, and to wish him much happiness in his retirement.

Dr H. Gwynne Vevers has kindly agreed to take over the editorship of the *Record*.

Volume 98 deals mainly with the publications of 1961 and also includes those which it was not possible to record in previous volumes. Section 2, Protozoa, has been divided into two parts, the first dealing with the parasitic and free-living forms and the second with the fossil forms. It is hoped that this arrangement will enhance the usefulness of the Section.

The amount of literature to be recorded increases annually and the compilation of the *Zoological Record* is a formidable task. The Zoological Record Committee is greatly indebted to the Editors and to the Recorders of the sections for their invaluable help and to the institutions and individuals listed on p. iv for their donations towards the expenses of publishing the volume.

L. HARRISON MATTHEWS, Sc.D., F.R.S.,

Scientific Director,

The Zoological Society of London.

It will greatly assist in the production and ensure the inclusion of the titles of books and articles in the Record if authors will forward a copy of their paper or memoir to the Editor of the Zoological Record, Zoological Society of London, Regent's Park, London, N.W.1. In the case of separately printed copies of articles so forwarded the original pagination should be given.

Published with financial assistance from the International Union of Biological Sciences (IUBS), International Council of Scientific Unions (ICSU) and UNESCO—see p. iv.

Donations to Zoological Record

received during 1961

	£	s.	d.	
American Entomological Society	8	16	10	
American Museum of Natural History	178	14	11	1.
American Society of Ichthyologists and Herpetologists	75	2	10	
American Society of Mammalogists	35	9	3	2.
Anonymous	100	0	0	
Auckland Institute and Museum	5	5	0	
Bombay Natural History Society	5	0	0	
British Herpetological Society	2	2	0	3.
British Museum (Natural History)	450	0	0	
British Ornithologists' Club	5	5	0	4.
British Ornithologists' Union	15	15	0	
British Trust for Ornithology	2	0	0	5.
Brooklyn Entomological Society, for Vol. 95	3	10	2	
Brooklyn Entomological Society, for Vol. 96	3	9	11	6.
Californian Academy of Sciences, for Vol. 94	9	17	10	
Californian Academy of Sciences, for Vol. 95	9	17	9	7.
Challenger Society	5	5	0	
Chicago Natural History Museum	17	12	1	
Conchological Society of Great Britain and Ireland	2	0	0	8.
Duke University, Department of Zoology	17	14	4	
Entomological Society of Alberta	3	7	1	9.
Entomological Society of America	70	15	11	
Entomological Society of Canada	33	14	4	
Entomological Society of Manitoba	3	10	3	10.
Geological Society of London	15	0	0	
Harvard University	88	10	7	11.
Hawaiian Entomological Society	17	12	1	
International Council of Scientific Unions	535	14	3	12.
Kennicott Club of Chicago	8	16	9	
Linnean Society of London	20	0	0	
Linnean Society of New South Wales	11	19	0	
Liverpool School of Tropical Medicine	3	3	0	13.
London School of Hygiene and Tropical Medicine	2	2	0	
Malacological Society of London	2	2	0	14.
Marine Biological Association of the United Kingdom	5	10	0	
Michigan, University of	35	6	9	15.
Naples Zoological Station	10	0	0	
New York Zoological Society	35	8	7	16.
Royal Entomological Society	25	0	0	
Royal Society of New Zealand	25	0	0	
Royal Society of Tropical Medicine and Hygiene	5	5	0	
Smithsonian Institution	35	7	4	17.
Transvaal Museum, for Vol. 96	5	5	0	
Transvaal Museum, for Vol. 97	5	5	0	18.
Wellcome Laboratories of Tropical Medicine	17	10	0	
Witwatersrand, University of the	2	0	0	
Zoological Survey of India	5	0	0	19.
Total	£1,981	2	10	20.

CONTENTS

1. COMPREHENSIVE ZOOLOGY. By S. MARKOWSKI, D.Sc. Pp. 1-22.
2. PROTOZOA. By R. A. NEAL, Ph.D., D.Sc., †R. S. J. HAWES, B.Sc., Ph.D., PAULINE CURDS, B.Sc., and SARAH E. BUNNEY, B.Sc. Pp. 1-206.
3. PORIFERA. By S. WARE. Pp. 1-16.
4. COELENTERATA. By H. DIGHTON THOMAS, M.A., Ph.D. Pp. 1-35.
5. ECHINODERMATA. By A. M. CLARK, M.A. Pp. 1-33.
6. VERMES. By S. PRUDHOE, R. W. SIMS, B.Sc. and J. O. MALCOLM. Pp. 1-114.
7. BRACHIOPODA. By E. F. OWEN. Pp. 1-23.
8. BRYOZOA. By A. B. HASTINGS, M.A., Ph.D. Pp. 1-11.
9. MOLLUSCA. By A. E. SALISBURY, A.M.I.E.E., MARCIA A. EDWARDS, B.Sc. and PAULINE CURDS, B.Sc. Pp. 1-159.
10. CRUSTACEA. By J. P. HARDING, Ph.D. and R. W. INGLE. Pp. 1-84.
11. TRILOBITA. By J. T. TEMPLE, M.A., Ph.D. Pp. 1-35.
12. ARACHNIDA, to which are added Merostomata, Pantopoda, Pentastomida, Tardigrada, Myriapoda and Onychophora. By E. BROWNING, M.B.E. Pp. 1-92.
13. INSECTA. By the Commonwealth Institute of Entomology. Pp. 1-396.
14. PROTOCHORDATA. By D. B. Carlisle, D.Sc. Pp. 1-22.
15. PISCES. By G. PALMER and E. I. WHITE, C.B.E., D.Sc., F.R.S. Pp. 1-83.
16. AMPHIBIA. By ALICE G. C. GRANDISON, B.Sc., PAULINE CURDS, B.Sc. and SARAH E. BUNNEY, B.Sc. Pp. 1-81.
17. REPTILIA. By MARCIA A. EDWARDS, B.Sc. and PAULINE CURDS, B.Sc. Pp. 1-79.
18. AVES. By Lt.-Col. W. P. C. TENISON, D.S.O. [Russian literature by Professor A. I. IVANOV]. Pp. 1-74.
19. MAMMALIA. By J. E. HILL. Pp. 1-118.
20. LIST OF NEW GENERIC AND SUBGENERIC NAMES. By L. G. ELLIS. Pp. 1-19.

PRINTED IN GREAT BRITAIN BY
HENRY LING LTD. AT THE DORSET PRESS
DORCHESTER, DORSET

Museums
Z
7991
Z87
v. 98
sect. 1

THE ZOOLOGICAL RECORD

VOLUME 98 SECTION 1 1961

COMPREHENSIVE ZOOLOGY

COMPILED BY

S. MARKOWSKI, D.Sc.

LONDON

PUBLISHED BY

THE ZOOLOGICAL SOCIETY OF LONDON

PRICE FIVE SHILLINGS

1962

UNIVERSITY OF MICHIGAN LIBRARIES

It will greatly help in the production of The Zoological Record and assist the Recorders of the individual sections, if authors will forward a copy of their paper or memoir to the Editor of the Zoological Record, The Zoological Society of London, Regent's Park, London, N.W.1. In the case of separately printed copies of articles so forwarded, the original pagination should be given.

All business correspondence concerning the Record should be addressed to the Scientific Director, The Zoological Society of London, Regent's Park, London, N.W.1.

THE MUSEUMS JOURNAL

PUBLISHED BY THE MUSEUMS ASSOCIATION

22 Fitzroy Street, Fitzroy Square, London, W.1.

This journal, which is published monthly, contains articles, reviews and technical notes on every Museum aspect of zoology and other sciences. It is the only English journal which deals with the installation and preservation of exhibits, and which reviews Museum work in all parts of the world.

It is published monthly price 4s., by the Association and can be obtained from the above address. It is distributed free to all members of the Museums Association (Subscription £3 3s. 0d. per annum), of which full particulars are obtainable from the Secretary at the above address.

COMPREHENSIVE ZOOLOGY

COMPILED BY
S. MARKOWSKI, D.Sc.

Vol. 98.

© Zoological Society of London, 1962.

105
105
504
2-13
142

In t

Al
on M
12 1

A.
Soc.

Ac
the
Com

Ad
syste
15 fi

Ad
bibli
Pap.

Ad
vatte
anläg
Swe

d'
de la
Ann.

Al
G. G
Blac
Seba

Al
and
Ark.

Al
of th
Ark.

Al
Fisch

Al
into
vaal.

Museums
Mus.-Zool.
Sotheran
8-13-65
1427

I. Comprehensive Zoology

COMPILED BY
S. MARKOWSKI, D.Sc.

This section includes works that deal with more than one branch of Zoology, or that are of general interest to zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special sections complete each subject. A few memoirs included in the special sections are repeated in this section. No attempt is made to include all works on genetics or physiology as these subjects are more suitably covered by the Imperial Bureau of Animal Genetics, *Resumptio Genetica* or *Physiological Abstracts*.

CONTENTS

	PAGE
I. TITLES	3
II. SUBJECT INDEX	19

I.—TITLES

In the list of titles the year has been omitted where it is the same as the volume year "of the Record", namely (1961).

- Abbott, W. & Hoes, H. D. Ecological observations on Minter Spring Brazos County, Texas. Texas J. Sci. 12 1960 : 24-35 2 figs.
- A.S. Stanley Henry Prater. J. Bombay nat. Hist. Soc. 57 3 1960 : 637-642 portr.
- Acara, A. & Nalbandoğlu, Ü. Preliminary report on the red tide outbreak in the Gulf of Izmir. Rapp. Comm. int. Mer Médit. 15 (3) 1960 : 33-38, 3 figs.
- Adam, H. Mikroskopische Anatomie des Nervensystems der Wirbeltiere. Fortschr. Zool. 13 : 83-118 15 figs.
- Adams, H. D. & Robinson, T. S. An ecological bibliography of Charles Christopher Adams. Occas. Pap. C. C. Adams Center ecol. Stud. No. 2 : 1-6.
- Agnedal, P.-O. Biologiska undersökningar i en vattenrecipient för aktivt avfall från atomenergianläggningar. Zool. Revy 22 (2) 1960 : 17-27 5 figs. (In Swedish).
- d'Aguilar, J., Benard, R. & Bessard, A. Une méthode de lavage pour l'extraction des Arthropodes terricoles. Ann. Epiphyt. Ser. C (8) 1 1957 : 91-99, 2 fig.
- Akamsin, A. D., Pachevski, V. P. & Polikarpov, G. G. (Radioactivity of some representatives of the Black Sea plankton and Nekton). Trav. Sta. biol. Sebastopol, 13 1960 : 305-308 fig. (In Russian.)
- Akesson, B. (1). A rapid method of orienting small and brittle objects for sectioning in definite planes. Ark. Zool. Ser. 2 13 : 479-482, 1 fig.
- Akesson, B. (2). A method of continuous observation of the object during vital staining with methylene blue. Ark. Zool. Ser. 2 13 : 321-322, 1 fig.
- Albrecht, M. L. Franz Ruttner 1882-1961. Z. Fisch. 10 : 387-388 1 fig.
- Allanson, B. R. & Gieskes, J. M. T. M. Investigations into the ecology of polluted inland waters in the Transvaal. Part I-II. Hydrobiologia 18 : 1-94 47 pls.
- Almaça, C. Contribuição para o estudo da zoneação marinha do litoral português. Bol. Soc. portug. Cien. nat. (2) 8 1960 : 201-208 1 fig.
- Altman, G. Gottfried Koller. Verh. dtch. zool. Ges. 1960 1961 : 537-539.
- Amemiya, I., Tamura, T., Hanyu, I. & Itazawa, Y. A note on the survey of the two lakes, Mosu-Ko and Syozi-ko. Comparison of the data of 1953 with those of 1929 and 1930. Jap. J. Limnol. 20 3 1959 : 97-100 2 figs. (English summary).
- Andersen, F. S. Effect of density on animal sex ratio. Oikos 12 : 1-16.
- Anderson, R. O. A modified flotation technique for sorting bottom fauna samples. Limnol. Oceanogr. 4 1959 : 223-225.
- Andersson, J. S. The occurrence of some invertebrate animal groups in the south bluffs in Northern Sweden. Oikos 12 : 126-156 12 figs.
- Andrew, F. J. see Geen, G. H.
- Andrewartha, H. G. Introduction to the study of animal populations. London (Methuen & Co. Ltd.) pp. xvii, 281, text figs.
- Anichini, C. Risultati dei primi dodici mesi delle ricerche planctonologiche eseguite dall' Istituto di Zoologia di Cagliari nell' Anno Geofisico Internazionale. Boll. Zool. 26 1959 : 669-682 9 figs.
- Anon (1). The Lerner Marine Laboratory at Bimini, Bahamas. New York (American Museum of Natural History) n.d. pp. 52 text figs.
- Anon (2). [Guide to the Zoological Museum of the University of Kiev.] (Kiev) (Vidavnistvo Kiivs' kogo Universiteta) 1959 : pp. 27, 15 figs.
- Anon (3). Prof. Dr. Chikataro Togari. Okajimas Folia Anat. Jap. 35 (1-3) 1960 : 5-8 1 pl.
- Anon (4). Kruger National Park. Annual Report of the Biologist 1958/1959. Koedoe No. 3 1960 : pp. 251.

- Anon (5).** [Yu. K. Petrushevskii]. Bull. Inst. freshw. Fish., Leningr. 49 1959: 222-225.
- Anon (6).** The Cole Library of Zoology and early Medicine, University of Reading. Nature, Lond. 188 1960: 1148-1151 1 fig.
- Anon (7).** Patuxent Wildlife Research Center. Circ. U.S. Fish Wildl. Serv. No. 107: pp. 23, text illust.
- Anon (8).** Donald Strathearn Rawson, 1905-1961. J. Fish. Res. Bd. Can. 18: 480-482, 1 fig.
- Anon (9).** In the Department of biological sciences. Vestn. Akad. Nauk SSSR 12: 76-79. [In Russian].
- Anon (10).** [Zoologists of the Soviet Union Handbook]. Moskva & Leningrad (Izdatel'stvo Akademii Nauk SSSR). pp. 292.
- Anon (11).** (Laboratory for ecology of poisonous snakes). Vestn. Akad. Nauk SSSR 2: 57-58 (In Russian).
- Appaswamy Rao, M.** The effect of environmental factors on the thymus gland of vertebrates. Bull. nat. Inst. Sci. India No. 10 1959: 106-111.
- Arauz, J.** Contribución al Centenario del "Origin de la Especies". Bol. Inf. Cient. nac. Quito 10 89 1959: 49-73.
- Astbury, W. T. & Beighton, E.** Structure of feather keratin. Nature, Lond. 191: 171-173 1 fig.
- Auerbach, M. & Rottengatter, G.** Untersuchungen über den Wasseraustausch des einzelnen Becken des Untersees (II Teil). Schweiz. Z. Hydrol. 22 2 1960: 598-640, 11 figs.
- Auerbach, S. I. & Crossley, D. A. jr.** A sampling device for soil microarthropods. Acarologia 2 1960: 280-287 3 pls.
- Autrum, H.** Physiologie des Sehens. Fortschr. Zool. 13: 257-302.
- Bachmaier, F.** Die "Neuen Regeln" der Zoologischen Nomenklatur, ausgearbeitet von der Internationalen Nomenklaturkommission, anlässlich des XV Internationalen Kongresses für Zoologie, London, 1958. Entomophaga (6): 163-166.
- Bainbridge, V.** The plankton of inshore waters off Freetown, Sierra Leone. Fish. Publ. Lond. No. 13 1960: 1-48 22 figs.
- Balsubrahmanyam, K.** Studies in the ecology of the Vellar Estuary: I. A preliminary survey of the estuarine bottom and its fauna conducted on 11-9-59. J. zool. Soc. India 12 1960 (1961): 209-215.
- Balfour-Browne, F.** The Failure of the International Commission on Zoological Nomenclature. Ent. Mon. Mag. (4) 18 1957: 274-278.
- Bankowski, Z.** Report of the Histochemical Division of Polish Anatomical Society Conference, on March 4 and 5 in Zoological Institute of the University of Wrocław. Folia Morph., Warszawa 11 1960: 331-334.
- Banoub, M. W.** Notes on the fouling of glass plates submerged in the Eastern Harbour, Alexandria 1958. Notes Mem. hydrobiol. Dep. Egypt No. 64 1-17 7 figs.
- Bao-Lin, W.** see Gurjanova, E. F.
- Barlow, H. B.** The coding of sensory messages. In Thorpe, W. H. & Zangwill, O. L., Current problems in animal behaviour. London (Cambridge University Press): 331-360.
- Barnes, B. I.** see Glover, R. S.
- Bassindale, R.** On the marine fauna of Ghana. Proc. zool. Soc. Lond. 137: 481-510, 5 figs.
- Barthelme, D. (1).** Erprobung eines Krautgroßers. Z. Fisch. N.F. 9 1960: 457-463 7 figs.
- Barthelme, D. (2).** Die horizontale Zooplanktonverteilung im Grossen Müggelsee. Z. Fisch. N.F. 9 1960: 333-352 6 figs.
- Bataller, J. R.** Enumeración de las especies nuevas del Eocénico de España. An. Esc. Perit. agric. Barcelona 13 1955: 3-50.
- Bauer, B. L.** Modifikation der bodianschen Silbermethode mit ammoniakalischem Silbernitrat zur Darstellung vegetativer Ganglienzellen und ihrer Fortsätze. Z. mikr. anat. Forsch. 67: 427-433.
- Beale, G. H.** The role of cytoplasm in inheritance. Sci. Progr. 49: 17-35.
- Beeton, A. M.** Environmental changes in Lake Erie. Trans. Amer. Fish. Soc. 90: 153-159 2 figs.
- Beighton, E.** see Astbury, W. T.
- Belyayev, G. M.** The quantitative distribution of the bottom fauna in the north western Bering Sea. Trud. Inst. Okeanol. 34 1960: 85-103 6 figs.
- Bemmel, A. C. V. van. Dr. F. J. Appelman.** Bijdr. Dierk. 31: 4 1 fig.
- Benard, R.** see d'Aguilar, J.
- Benazzi, M.** Il problema della ereditarietà dei caratteri acquisiti. Ann. Univ. Ferrara N.S. (3) Biol. anim. 2 3: 97-118 11 figs. [English summary.]
- Benoit, J.** Action de la lumière visible, par l'intermédiaire de l'oeil, sur diverses fonctions de l'organisme des vertébrés, et en particulier sur la fonction de reproduction. Scientia, Bologna 96 6: 182-186.
- Berezik, A. (1).** Über die Tierwelt einer eigentümlichen unterirdischen Lebensstätte. Hidrológiai Közlemény 6 1960 516-518 (in Hungarian with German summary).
- Berezik, A. (2).** Einige Beobachtungen bezüglich der horizontalen Verteilung des Makrobenthos seichter "Pannonischer" Seen. Acta zool., Budapest 7: 49-72 14 figs.
- Bergh, H. K. van den.** Étienne de Lacépède, un des pionniers de la conception moderne des jardins zoologiques. Zoo, Antwerp 27: 15-20 4 figs.
- Bernal, J. O.** The evolution of life. Bull. nat. Inst. Sci. India No. 7 1955: 117-126.
- Bernard, F. (1).** La vie marine en grande profondeur. Bull. Soc. zool. Fr. 85 1960: 255-274.
- Bernard, F. (2).** Résultats scientifiques des campagnes de la "Calypso XVI." Campagne 1955 en Méditerranée Nord-Orientale. 3. Problèmes de fertilité élémentaire en Méditerranée de 0 à 300 mètres de profondeur. Ann. Inst. Oceanogr. Paris N.S. 39: 61-160 28 figs.
- Bernink, H.** 50 Jaren Museum "Natura Docet". Natura, Amst. 58 6: 64-67 4 figs.
- Bessard, A.** see d'Aguilar, J.
- Besem, J. J. & Raven, C. P.** A simple model for the estimation of the cytoplasmic information content of the animal egg. Proc. Ned. Akad. Wet. Amst. 64 C. 2: 147-156.
- Bielakna-Osuchowska, Z.** Histochemical methods of detecting lipids. Folia morph., Warszawa 11 1960: 201-215.

- Bielański, J.** A polarographic method of measuring the intensity of respiration in aquatic animals. *Acta biol. exp. Warszawa* **19** 1959 : 41-48 4 figs.
- Bigelow, R. S.** Higher categories and phylogeny. *Syst. Zool.* **10** : 86-91 1 fig.
- Blackwelder, R. E.** The functions and limitations of classification. *Syst. Zool.* **8** 1959 (1960) : 202-211.
- Blain, R. L.** *see* Daniel, J. C. jr.
- Blandino, G.** Osservazioni critiche sul neo-darwinismo. *R.C. Accad. Lincei* (8) **30** 6 : 960-967.
- Bodrova, N. V. & Krajakhin, B. V.** Sorting of aquatic invertebrates by means of electric current. *Byull. Inst. Biol. Vodochr. No. 7* 1960 : 57-58. [In Russian.]
- Boev, S. N., Galouzo, I. G. & Gvozdev, E. V.** Litterature sur la parasitologie du Kazakhstan : bibliographie analysée sur les parasites et les maladies parasitiques de l'homme et des animaux sauvages et domestiques. *Alma Ata* 1957 : pp. 311.
- Boetzel, W. van.** Het Natuurhistorisch Museum in Tilburg. *Natura, Amst.* **58** 6 : 68-70 3 figs.
- Bogachev, V. V.** [Contributions to the history of the freshwater fauna in Eurasia.] Kiev (Izdatel'stvo Akademii Nauk Ukrainskoi SSR) : pp. 404, 58 pls. incl. in pagination, text figs.
- Bogorov, V. G. & Vinogradov, M. E.** The distribution of the zooplankton in Kurl-Kamtschatka region of Pacific. *Trud. Inst. Okeanol.* **34** 1960 : pp. 60-84 10 figs.
- Bolognari, A.** Vedute attuali sul nucleolo e sull'ergastoplasma degli ovociti e delle cellule tumorali. *Atti Soc. pelorit.* **7** : 1-104 54 figs. [English summary.]
- Bonn, E. W. & Holbert, L. R.** Some effects of rotenone products on municipal water supplies. *Trans. Amer. Fish. Soc.* **90** : 287-297.
- Bonnin, J. & Julien, M.-H.** La réserve naturelle au Cap-Tisan. *Penn ar Bed No. 24* : 1-5 3 figs.
- Bourcart, J., Genesseeux, M. & Klimek, E.** Les canyons sous-marins de Banyuls et leur remplissage sédimentaire. *C. R. Acad. Sci., Paris* **253** : 19-24 3 figs.
- Boyd, J. M.** Studies of the differences between the fauna of grazed and ungrazed grassland in Tiree, Argyll. *Proc. zool. Soc. Lond.* **135** 1960 : 33-54.
- Braun, A. D.** Diffusion of creatine and other substances through skeletal muscles at their being acted upon with stimulators. in Rosenthal, D.L. & others. (Problems in cytology and protistology : a collection of articles.) Moskva & Leningrad (Izdatel'stvo Akademii Nauk SSSR) 1960 : 121-133.
- Brewer, R.** A brief history of ecology. Part 1. Pre-nineteenth century to 1919. *Oec. Pap. C.C. Adams Center ecol. Stud. No. 1* 1960 : 1-18.
- Brisson, C.** Le Museum d'Elbeuf. *Rev. Soc. Sav. Haute Norm. No. 21* : 79-90 1 pl.
- Broadbent, D. E.** Human perception and animal learning. in Thorpe, W. H., & Zangwill, O. L., Current problems in animal behaviour. London (Cambridge University Press) : 248-272.
- Brough, J., Matheson, C. & Jefferson, G. T.** Zoology. The Cardiff Region. A Survey. *Brit. Ass.* 1960 : 58-74 3 pls.
- Brown, A. W.** *see* David, G. B.
- Brown, F. A. Jr.** The rhythmic nature of animals and plants. *Smithson. Rep.* **4402** 1959 : 385-406.
- Brown, R. H. J.** A simple activity recorder. *J. Insect Phys.* (3) 1959 : 125-126 2 figs.
- Brown, W. L.** An international taxonomic register : preliminary proposals. *Syst. Zool.* **10** : 80-85.
- Brujins, M. F. M.** Een bezoek aan het Zwitserse Nationale Park. *Levende Nat.* **64** 8 : 169-172.
- Bruun, A. F.** Danish naturalists in Thailand 1900-1960. *Nat. Hist. Bull. Siam Soc.* **20** : 71-80 3 pls.
- Bucher, O.** Das neue Histologisch-Embryologische Institut in Lausanne. *Z. mikr.-anat. Forsch.* **66** 1960 : 393-407 10 figs.
- Buchsbaum, R. & Milne, L. J.** Living invertebrates of the world. London (Hamish Hamilton) 1960 pp. 303 : frontis. 80 pls. (col.) incl. in pagination, text. illust.
- Bukhman, M. P., Polina, R. I. & Sergeev, L. V.** (Method of mounting for fluorescent microscopy.) *Zh. Obshch. Biol.* **17** 3 1956 : 239-240. [In Russian.]
- Bukhman, M. P. & Raikov, I. B.** (On suitability of some histological fixatives for ultra-violet microscopy.) *Zh. Obshch. Biol.* **17** 3 1956 : 233-238 2 pls. [In Russian.]
- Bullock, T. H.** The origins of patterned nervous discharge. *Behaviour* **17** : 48-59 1 fig.
- Burke, P. J.** Nomenclature of biological devices. *Science, N.Y.* **132** 1960 : 1910.
- Burkhardt, D.** Allgemeine Sinnesphysiologie und Elektrophysiologie der Rezeptoren. *Fortachr. Zool.* **13** : 146-189.
- Cabioch, L.** Étude de la répartition des peuplement benthiques au large de Roscoff. *Cah. Biol. mar.* **2** 1 : 1-40 2 figs. map.
- Candeias, A.** Alfredo de M. Ramalho, 1894-1959. *J. Cons. Int. Explor. Mer* **26** : 235-237 1 fig.
- Cane, V.** Some ways of describing behaviour. in Thorpe, W. H. & Zangwill, O. L., Current problems in animal behaviour. London (Cambridge University Press) : 361-388.
- Caráusu, S. I.** Trente années depuis la fondation de la Station Zoologique Maritime d'Agigea et vingt années depuis la mort de son fondateur le professeur Ioan Borcea. *Lucrar. Stat. zool. mar. Agigea (Vol. Festiv.)* 1959 : I-XXXIX 6 pls.
- Carpine, C.** Note préliminaire sur les communautés benthiques de la région de Monaco. *Bull. Inst. oceanogr. Monaco No. 1191* 1960 : 1-4.
- Carthy, J. D.** The world of feeling. London (Phoenix House) 1960 : pp. 64 frontis. 16 pls. text illus.
- Casati, A.** Questioné di radiobiologia generale. 6. La "zona d'azione". *Caryologica* **13** 3 1960 : 659-712. [English summary.]
- Castellanos, A.** Trascendencia de la obra de Florentino Ameghino. *Rev. Fac. Cienc. nat. Salta* **1** 1 1959 : 35-56 9 figs.
- Chandler, A. C. & Read, C. P.** Introduction to parasitology with special reference to the parasites of man. 10th edition. New York & London (John Wiley & Sons, Inc.) : pp. xii 822 text illust.
- Chen, P. S.** Aus dem Forschungsgebiet der Entwicklungsphysiologie. *Vjchr. naturf. Ges. Zürich* **105** 1960 : 249-259 4 figs.
- Chernova, I. A.** *see* Volkova, A. A.
- Chetverikov, S. S.** On certain aspects of the evolutionary process from the standpoint of modern genetics. *Proc. Amer. phil. Soc.* **105** : 167-195.

- Chew, R. M. & Dammann, A. E.** Evaporative water loss of small vertebrates, as measured with an infra-red analyzer. *Science*, N.Y. **133** : 394-395.
- Choisy, M.** De quelques reflexions sur l'évolution et ses theories. *Bull. mens. Soc. linn. Lyon* **30** 2 : 30-39.
- Christiansen, B.** Fauna north of the Arctic Circle. *Troms. Mus. Skr.* **8** 1960 : 73-99.
- Chung-Yen, J.** see Gurjanova, E. F.
- Clara, M.** Was ist Sarkolemm? *Anat. Anz.* **110** : 41-51.
- Clarke, G. L. & Hubbard, C. J.** Quantitative record of the luminescent flashing of oceanic animals at great depths. *Limnol. Oceanogr.* **4** 1959 : 163-180 11 figs.
- Claude, A.** Mise en évidence par microscopie électronique d'un appareil fibrillaire dans le Cytoplasma et le noyau de certaines cellules. *C. R. Acad. Sci., Paris* **253** : 2251-2253 4 pls.
- Cloudsley-Thompson, J. L.** Animal behaviour. Edinburgh & London (Oliver & Boyd) 1960 pp. xiii 161 : frontis. 15 pls.
- [Coiffart, H. & Strinati, P.] Faune cavernicole et endogée de l'île de Minorque. Mission H. Coiffart et P. Strinati, en 1958. *Arch. Zool. exp. gén.* **99** : 227-305
- Colebrook, J. M. & Robinson, G. A.** The seasonal cycle of the plankton in the North Sea and the north-eastern Atlantic. *J. Cons. Int. Explor. Mer* **28** : 156-165. 2 figs.
- Collin, J. E.** A Critical Note on two new "Rules" proposed to be added to the Revised Code of Rules for Zoological Nomenclature. *Ent. Mon. Mag.* **19** : 219 1958 : 61-62.
- Collins, W. B.** Wild life conservation in Ghana (Part I). *Afr. Wild Life* **15** : 205-212 6 figs.
- Colosi, G. (1).** Sul valore logico delle teorie darwiniane. *R. C. Accad. Lincei* (8) **30** 5 : 659-663.
- Colosi, G. (2).** L'Opera di Danielle Rosa et la dottrina dell'evoluzione. *Mem. Accad. Torino* (3) **4** pt. 1 No. 7 : 329-368 portr.
- Conci, C.** Ricordo di un Naturalista trentino : il Prof. Alessandro Canestrini (1879-1948). *Studi trentini* **36** 2 1959 : 128-132 portr.
- Conklin, E. G.** A brief history of the American Philosophical Society. *Yearb. Amer. phil. Soc.* **1960** 1961 : 36-62.
- Conover, J. R.** see Raymont, J. E. G.
- Cordone, A. J. & Kelley, D. W.** The influences of inorganic sediment on the aquatic life of streams. *Calif. Fish Game* **47** : 189-228.
- Corlett, J. (1)** Zooplankton observations at Ocean Weather stations I and J in 1957 and 1958. *Rapp. Cons. Explor. Mer* **149** : 200-201.
- Corlett, J. (2)** Dry weight of plankton in the western Barents sea. *Ann. Biol., Copenhagen* **16** 1959 (1961) : 68-69 1 fig.
- Costa Lima, A. da.** Taxinomia o Taxinomia versus Taxinomia. *Neotropica* **7** (23) : 53-54.
- Cragg, J. B.** Some aspects of the ecology of moorland animals. *J. anim. Ecol.* **30** (2) : 205-234 7 figs.
- Cragg, J. B. & Anthony, H. D.** Some south Atlantic islands. *Proc. roy. Instn. Gr. Brit.* **38** 1960 : 324-345 9 figs.
- Crosale, D. A. jr.** see Auerbach, S. I.
- Csapo, S.** see Palkovits, M.
- Cummins, K. W.** see Lauff, G. H.
- Curry-Lindahl, K. (1).** Changements de paysage et changements de faune en Suède. *Terre et la Vie* **4** 1960 : 169-193 4 figs.
- Curry-Lindahl, K. (2).** Landscape changes and the vertebrate fauna in Sweden during the last 150 years. *Bijdr. Dierk.* **31** : 27-44 14 figs.
- Czapik, A.** Fauna des Kläranlagemodells in Kraków. *Acta Hydrobiol., Kraków* **3** : 63-67.
- Ozekaliński, L.** see Ostrowski, K.
- Da Gama, M. M.** Dr. João Miguel Ladeiro (1891-1960). *Mem. Mus. zool. Univ. Coimbra* No. 271 : 1-5 1 pl.
- Dajoz, R.** see Rousseau, M.
- Dammann, A. E.** see Chew, R. N.
- Daniel, J. C. jr. & Blain, R. L.** Background radiation and endemic faunal range in the San Luis Valley and Southern Colorado. *Gr. Basin Nat.* **19** 1 1959 : 37-42 4 figs.
- Danielli, J. F.** Some new approaches to inheritance and evolution. *Proc. roy. Instn. Gr. Brit.* **38** 1960 : 271-276.
- Danneel, R.** Zur Geschichte des Zoologischen Instituts in Bonn. *Verh. dtsh. zool. Ges.* **1960** : 36-38.
- Dathe, H. (1).** Ludwig Zukowsky 70 Jahre. *Säugetierk. Mitt.* **7** 1959 : 29 portr.
- Dathe, H. (2).** Bibliographie der Tierpark Berlin. Zusammenstellung aller wissenschaftlichen und kulturgeschichtlichen Schriften, die zum Tierpark Beziehung haben. *Milu* **1** (1) 1960 : 35-41.
- David, G. B. & Brown, A. W.** The histochemical recognition of lipid in the cytoplasmic network of neurones of vertebrates. *Quart. J. micr. Sci.* **102** : 391-397 2 figs.
- David, G. B., Mallion, K. B. & Brown, A. W.** A method of silvering the "Golgi apparatus" (Nissl network) in paraffin sections of the nervous system of vertebrates. *Quart. J. Micr. Sci.* **101** 1960 : 207-221 2 figs.
- David, P. M.** The influence of vertical migration on speciation in the oceanic plankton. *Syst. Zool.* **10** : 10-16.
- Davis, D. E.** Principles for population control by gametocides. *Trans. N. Amer. Wildl. Conf.* No. 26 : 160-167.
- Davis, J. J.** see Watson, D. G.
- Davis, J. L.** Aim and method in zoogeography. *Geogr. Rev.* **51** 3 : 412-417.
- Dekeyser, P. L. & Derivot, J.** La vie animale au Sahara. *Paris (Librairie Armand Colin)* 1959 : pp. 220 text illust.
- Delamare Deboutville, C. & Paulian, R.** Recherches sur la faune des nids et des terriers en Basse Côte d'Ivoire. *Paris (Paul Lechevalier)* 1952 : pp. 116, text illus. Encyclopédie biogéographique et écologique, VIII.
- Demaux, J.** Une méthode de chasse de la faune des mousses subaquatiques. *Entomologiste* **3** : 31-33.
- Dementiev, G. P.** The protection of fauna in the U.S.S.R. *Smithson. Rep.* **4407** 1959 : 483-493.
- Derivot, J.** see Dekeyser, P. L.

- Deseő, K.** Modifizierte Abdeckungsmethode zur Untersuchung der Landbiocoënen. *Opusc. zool. Inst. zoosyst. Univ. budapest.* 2 (3) 1957: 21-26.
- Deutsch, J. A.** The structural basis of behaviour. London, Chicago (Cambridge University Press) 1960: pp. ix 186 text illust.
- Digby, P. S. B. (1).** Midnight-sun illumination above and below the sea surface in the Sörgat, N.W. Spitsbergen, and its significance to plankton. *J. Anim. Ecol.* 29 1960: 273-297 9 figs.
- Digby, P. S. B. (2).** The vertical distribution and movements of marine plankton under midnight-sun conditions in Spitsbergen. *J. Anim. Ecol.* 30: 9-25 3 figs.
- Dimov, I. G.** Le zooplancton de la Mer Noire devant la côte bulgare pendant les années 1954, 1955 et 1956. *Trud. nauch.-izsl. Inst. Rib. Varna* 2 1960: 85-147.
- Dobzhansky, T. (1).** Taxonomy, molecular biology, and the peck order. *Evolution* 15: 263-264.
- Dobzhansky, T. (2).** Adaptation in man and animals. A synthesis. *Ann. N.Y. Acad. Sci.* 91: 634-643.
- Dodge, W. E. & Snyder, D. P.** An automatic camera device for recording wildlife activity. *J. Wildl. Mgmt.* 24 1960: 340-342 5 figs.
- Dolgopolskaya, M. A.** (Settling of marine organisms in connection with the depth and distance from the shore of the submerged object in the Crimean part of the Black Sea.) *Trav. Sta. biol. Sebastopol* 12 1959: 192-208 10 figs. [In Russian.]
- Dollfus, R. Ph. see Stoll, N. R.**
- Dorst, J. (1).** Animaux et végétaux rares de la région Méditerranéenne. Rapport general. *Terre et la Vie* 1959 Suppl. 1959: 3-11.
- Dorst, J. (2).** Le rôle du scientifique dans la conservation de la nature. *Experientia* 17: 1-4.
- Downs, J. F.** Domestication: An examination of the changing relationship between man and animals. *Kroeber Anthropol. Soc.* 22 1960: 18-67.
- Drischel, H.** Kybernetik und Biologie. *Wiss. Z.K.-Marx Univ. Leipzig Math.-Nat. R.* 9 1960: 733-744 22 figs.
- Duncan, T. O.** The Pacific region of the Bureau of Commercial Fisheries. *Circ. U.S. Fish. Wildl. Serv.*, No. 108: 1-17.
- Dunn, D. R.** The bottom fauna of Llyn Tegid (Lake Bala), Merionethshire. *J. anim. Ecol.* 30: 267-281.
- Dvořák, J.** Some remarks on the final anatomical nomenclature of Paris. *Folia morph., Warszawa* 20: 323-326.
- Eales, N. B.** The littoral fauna of the British Isles: a handbook for collectors. Third edition. London (Cambridge University Press) pp. xvi, (ii), 306: frontis. 24 pls. text illust.
- Edinger, T.** Agassiz lebt, II. *Natur u. Volk* 91: 216-218 portr.
- Edney, E. B.** The survival of animals in hot deserts. *Smithson. Rep.* 4403 1960: 407-425.
- Eggleston, F. E.** Paul Smith Welch 1882-1959. *Hydrobiologia* 17: 259-261 portr.
- Ehrlich, P. R.** Has the biological species concept outlived its usefulness? *Syst. Zool.* 10: 167-176, 1 fig.
- Eibio-Eibesfeldt, I.** Naturschutzprobleme auf den Galapagos-Inseln. *Acta tropica* 17 1960: 97-137.
- Einarsson, H. & Gürtürk, A.** On plankton communities in the Black Sea. *Rep. Fish. Res. Center. Istanbul. (Mas. Res.)* 1 (8) 1959: 1-28 12 figs.
- El-Hawary, M. A.** The zooplankton of the Egyptian lakes: 1.—A preliminary study of Lake Maryût and Lake Idku. *Notes Mem. hydrobiol. Dep. Cairo, No. 52* 1960: pp. 17.
- Ellis, D. V.** Marine infaunal benthos in Arctic North America. *Techn. Pap. Arctic. Inst. N. Amer. No. 5* 1960: 1-53 17 figs., and *Stud. Fish. Res. Bd. Can. No. 623* 1960.
- Elster, H. J. & Jensen, K. W. & others.** Limnological and fishery investigations of the Nozha Hydrodrome near Alexandria, Egypt. *Notes Mem. hydrobiol. Dep. Egypt No. 43* 1960: 1-99.
- Engel, H.** Dutch natural history museums in the service of nature preservation. *Bijdr. Dierk.* 31: 59-62 1 pl.
- Eriksen, C. H. see Lauff, G. H.**
- Euler, U. S. von.** Occurrence of catecholamines in Arania and invertebrates. *Nature, Lond.* 190: 170-171.
- Ewing, M. see Hunkins, K. L.**
- Fage, L. (1).** A postscript on subterranean evolution. *Bull. nat. Inst. Sci. India No. 7* 1955: 79-84.
- Fage, L. (2).** Nouvelles remarques sur l'adaptation cavernicole. *Sous le Plancher No. 2* 1956: 2-8.
- Fastie, W. G. see Seliger, H. H.**
- Fedorowicz, Z.** Discours de Georges Forster prononcé le 2 Février 1785 a l'Ecole Principale du Grand-Duché de Lithuanie a Wilno intitulé "limites Historiae Naturalis". *Memorabilia. Zool. Ossolineum* 7: pp. 68. [In Polish, French summary].
- Ferens, B.** Ochrona gatunkowa zwierząt w Polsce. *Kraków Zakład Ochrony Przyrody, Polska Akademia Nauk* 1957: pp. 327 text figs. (Wydawnictwo Popularnonaukowe Nr. 13.)
- Fiennes, R. N. T.-W.-.** Report of the pathologist for the year 1959. *Proc. zool. Soc. Lond.* 136: 489-503.
- Fischer, F. C. J.** In memoriam Dr. W. Beijerinck. *Ent. Ber. Amst.* (20) 5 1960: 81-82.
- Fischer, P. H. (1).** Aperçu floristique et faunistique sur un atoll de "Grande-Barrière" Australienne. *C. R. Soc. Biogeogr.* 37: 86-87.
- Fischer, P. H. (2).** La limite méridionale de la région indopacifique sur la côte orientale de l'Australie. *C. R. Soc. Biogéogr.* 37: 88-90.
- Fischer, P. H. (3).** Coup d'oeil sur la Grande-Barrière d'Australie et en particulier sur un récif du groupe du Capricorne. *Cahiers pacif. No. 3*: 53-74 6 figs.
- Flint, V. E. & Golovkin, A. N.** The rôle of the ridge Tannu-Ola as a zoogeographical barrier and some problems of the origin of the Tura steppe-fauna. *Zool. Zh.* 40 (4): 556-567 6 figs.
- Flora, C. J.** The species commonality index: A method for comparing habitats. *Pacif. Sci.* 15: 307-308.
- Fontaine, M.** Remarques sur les difficultés de recherches éco-physiologiques appliquées à la solution de certains problèmes posés par l'étude écologique de milieux lagunaires. *Rapp. Comm. int. Mer Médit.* 15 1960: 163-170 1 fig.
- Forster, R. R.** The New Zealand fauna and its origins. *Proc. Roy. Soc. N.Z.* 89 1: 51-56.

- Fraser, J. H. (1). Plankton investigations from Aberdeen. *Ann. Biol., Copenhagen* 16 1959 (1961): 75-76.
- Fraser, J. H. (2). The plankton of the Iceland-Faroe Ridge in 1958. *Rapp. Cons. Explor. Mer* 149: 179-182.
- Fraser, J. H. (3). Use of polyethylene glycol in biology. *Nature, Lond.* 189: 241-242.
- Frei, E. Eine neue Methode zur Herstellung von Gewebekultur-Totalpräparaten in wässrigen Lösungen. *Acta anat.* 41 (2-3) 1960: 38-44 10 figs.
- Friedrich-Freksa, H. Genetik und biochemische Genetik in den Instituten der Kaiser-Wilhelm-Gesellschaft und der Max-Planck-Gesellschaft. *Naturwissenschaften* 48: 10-22 13 figs.
- Frisch, K. V. Ruth Bentler. *Verh. dtsch. zool. Ges.* 1960: 544-546.
- Fry, F. E. J. *see* Rawson, D. S.
- Fujii, S. A single differential staining method for vaginal smears. *J. Fac. Fish. Hiroshima Univ.* 3 (1) 1960: 197-201 1 pl.
- Fukui, R. *see* Nakai, Z.
- Gabe, M. Existence de cellules parafolliculaires dans la glande thyroïde de quelques Sauripéides et Anamniotes. *C.R. Acad. Sci., Paris* 253: 535-537.
- Galitskaya-Gladchenko, A. Y. [On the stratigraphy of carboniferous deposits in Northern Kirgizia.] *Izvest. Akad. Nauk. Kirgiz.SSR Nat. Hist. techn.* 2 9 1960: 5-22. [In Russian.]
- Galouzo, I. G. *see* Boev, S. N.
- Geelen, J. F. M., Coenen, H. C. J., Stoffers, A. L. & Teunissen, D. De Haterste vennen. *Levende Nat.* 64 6: 121-129 6 figs.
- Geen, G. H. & Andrew, F. J. Limnological changes in Seton Lake resulting from hydroelectric diversions. *Progr. Rep. int. Pacif. Salm. Comm., No. 8: pp. (iii) 76 text figs.*
- Genesseeaux, M. *see* Bourcart, J.
- Gentili, J. The survival of natural environment in Western Australia. *W. Aust. Nat.* 7: 179-190 2 figs.
- George, C. J. The affinities and evolution of the major triploblastic phyla of animals. *J. Anim. Morph. Physiol.* 7 1960: 9-14.
- Getsava, A. B. *see* Timofeev-Resovskii, N. V.
- Gianotti, F. S. Apporti di "carico biologico" attraverso la nuova adduzione di acque al Lago Trasimeno. *Boll. Zool.* 26 (2) 1959: 591-599 2 figs. 1 pl.
- Gieskes, J. M. T. M. *see* Allanson, B. R.
- Gilbert, N. Polygene analysis. *Genet. Res.* 2: 96-105.
- Gillbricht, M. Über den Zusammenhang zwischen verschiedenen Messungen im Meer. *Helgoländ. wiss. Meeresuntersuch.* 7 (5): 238-251.
- Gilyarova, V. N. Ultraviolet rays in animal husbandry. *Vestn. Akad. Nauk, SSSR* 1 1: 115-116. [In Russian.]
- Glover, R. S. & Barnes, B. I. The continuous plankton recorder survey: plankton around the British Isles during 1959. *Ann. Biol., Copenhagen* 16 1959 (1961): 76-80 9 figs.
- Gnanamuthu, C. P. Speciation and the new systematics. *Bull. nat. Inst. Sci. India No. 7* 1955: 64-68.
- Godlewski, H. A la mémoire du Prof. Mieczysław Konopacki. *Folia morph., Warszawa* 20: 209-217 1 fig.
- Golovkin, A. N. *see* Flint, V. E.
- Gradwell, G. R. A simple and inexpensive microscope lamp. *Ent. Mon. Mag.* 20 1959: 272-273 1 fig.
- Gradwell, G. R. *see* Varley, G. C.
- Graham-Jones, O. Tuberculosis in zoo animals. *Symp. zool. Soc. Lond. No. 4*: 69-79.
- Gray, J. General principles of vertebrate locomotion. *Symp. zool. Soc. Lond. No. 5*: 1-11 5 figs.
- Greenberg, M. J. Ancestors, embryos and symmetry. *Syst. Zool.* 8 1959 (1960): 212-221.
- Griesel, J. A new game sanctuary for the Orange Free State. The Willem Pretorius Game Reserve. *Afr. Wild Life* 15: 121-125 3 figs.
- Grimås, U. The bottom fauna of natural and impounded lakes in northern Sweden (Ankorvattnet and Blåsjön). *Rep. Inst. freshw. Res. Drottningholm No. 42* 183-237.
- Grundfest, H. Ionic membranes in electrogenesis. *Ann. N.Y. Acad. Sci.* 94: 405-457 30 figs.
- Grusov, L. N. *see* Pavahtiks, E. A.
- Grzycki, S. (1). The morphology of the Golgi element examined refractometrically by phase contrast microscopy. *Proc. zool. Soc., Calcutta* 12 1959 (1960): 59-69 2 pls.
- Grzycki, S. (2). Recherches réfractométriques sur l'appareil de Golgi, au microscope à contraste de phase. *Arch. Anat. micr. Morph. exp.* 50 I: 59-68.
- Guareschi, C. Problemi attuali di biologia marina. *Boll. Zool.* 26 (2) 1959: 653-668.
- Günther, K. Werner Ulrich. *Zool. Beitr. N.F.* 5 1960: 179-198 1 pl.
- Gurjanova, E. F., Lin, J. Y., Scarlato, O. A., Uschakov, P. V., Bao-Lini, W. & Chung-Yen, J. A short report on the intertidal zone of the Shantung peninsula (Yellow Sea). *Bull. Inst. mar. Biol., Peking* 1 2 1958: 1-43 (Chinese with Russian summary).
- Gurr, E. & MacConaill, M. A. The Falcic Acid Dyes and their applications in histological staining. *J. R. Micros. Soc.* 79: 353-357.
- Gurr, E. *see* MacConaill, M. A.
- Gürtürk, N. *see* Einarsson, H.
- Gussow, W. C. Jurassic-Cretaceous boundary in Western Canada and late Jurassic age of the Kootenay formation. *Trans. roy. Soc. Can. (3)* 54 4 1960: 45-64 2 figs.
- Gvozdev, E. V. *see* Boev, S. N.
- H.G.C. Robert Wylie Lloyd, F.R.E.S. *Ent. mon. Mag. (4)* 19 1958: 97.
- Haartman, L. v. Charles Darwin and ethology. *Comment. biol. Helsingf.* 22 7: 1-28 5 figs.
- Haldane, J. B. S. (1). Suggestions for evolutionary studies in India. *Bull. nat. Inst. Sci. India No. 7* 1955: 25-28.
- Haldane, J. B. S. (2). More precise expressions for the cost of natural selection. *J. Genet.* 57: 351-360.
- Hallgrímsson, I. Joint Danish, Icelandic, and Norwegian plankton research in the north-east Atlantic in June 1959. *Ann. Biol., Copenhagen* 16 1959 (1961): 71-72 1 fig.

- Halme, E.** Toivo Henrik Järvi, 1877-1960. *J. Cons. Int. Explor. Mer* **26** : 238-240 1 fig.
- Hanson, J.** The structure of muscle cells in the mechanism of contraction. *Sci. Survey* **2** : 205-229 8 pls., 3 figs.
- Hanson, W. C.** *see* Watson, D. G.
- Hanyu, I.** *see* Amemiya, I.
- Harvey, E. N.** A history of luminescence from the earliest times until 1900. *Mem. Amer. phil. Soc.* **44** 1957 : 1-692 50 figs.
- Heezen, B. C.** *see* Hunkins, K. L.
- Heinsheimer, J.** La conservación y protección de la naturaleza en la Antártica. *An. Parq. nac. B. Aires* **8** 1959 : 135-143 5 figs.
- Hemming, F. (1).** Official lists of valid zoological names and indexes of rejected and invalid names. *Entomologist* **90** 1957 : 313.
- Hemming, F. (2).** Colloquium on zoological nomenclature, London, July 1958. *Entomologist* **90** 1957 : 298.
- Hemming, F. (3).** Zoological Nomenclature. *Entomologist* **91** 1958 : 50.
- Hennipman, E., Nijhoff, P., Swennen, C., Vader, W. J. M., Wilde, W. J. J. O. de & Tulp, A. S.** Verslag van de Nederlandse biologische expeditie Turkije 1959. *Levende Nat.* **64** Bijlage van no. 5 : 1-25 15 figs.
- Heptner, V. G.** Vladimir Georgyevich Heptner. On the occasion of 60th Anniversary. *Zool. Zh.* **40** (11) : 1748.
- Heyligers, P. C.** Soil fauna of the osier beds of Brabantse Biesbosch. *Arch. néerl. Zool.* **13** 1960 : 620-623.
- Hillaby, J.** Future of natural faunas. *Nature, Lond.* **190** : 20-21.
- Hoes, H. D.** Biotic changes in a bay associated with the end of a drought. *Limnol. Oceanogr.* **5** 1960 : 326-336 2 figs.
- Hoffmann, C.** Vergleichende Physiologie des Temperatursinnes und der chemischen Sinne. *Fortschr. Zool.* **13** : 190-256.
- Hoffmann, L.** Animaux rares et menacés de la région Méditerranéenne française. *C.R. Rév; Tech. Athènes de U.I. C.N.* **5** 1959 in:—C.R. Sta. biol. Tour du Valat No. 5 (1961) : 44-49.
- Hohorst, W.** Otto zur Straassen 9 Mai 1869-21 April 1961. *Natur u. Volk* **91** : 201-204, portr.
- Holbert, L. R.** *see* Bonn, E. W.
- Hora, S. L.** Glimpses of evolutionary thought among the ancient Hindus—With biographical notes by S. K. Saraswati. *Bull. nat. Inst. Sci. India* No. 7 1955 : 19-24.
- Hubbard, C. J.** *see* Clarke, G. L.
- Hulse, J. E.** Studies in warning coloration and mimicry. III. Evolution of Müllerian mimicry. *Evolution* **15** : 567-568.
- Hunkins, K. L., Ewing, M., Heezen, B. C. & Menzies, R. J.** Biological and geological observations on the first photographs of the Arctic Ocean deep-sea floor. *Limnol. Oceanogr.* **5** 1960 : 154-161 5 figs.
- Hynes, H. B. N.** The effect of sheep-dip containing the insecticide BHC on the fauna of a small stream; including *Simulium* and its predators. *Ann. trop. Med. Parasit.* **65** 192-196.
- Iablokoff-Khnzorian, S. M.** Sur de rôle des zones pour l'évolution. *Zool. Zh.* **40** : 797-808.
- Ichikawa, R.** On the concentration factors of some important radionuclides in the marine food organisms. *Bull. jap. Soc. sci. Fish.* **27** (1) : 66-74.
- Ilyichev, V. D.** Some regularities in the evolution of the external ear of the vertebrates. *Zool. Zh.* **40** (12) : 1795-1807 5 figs.
- Irie, H.** *see* Tanaka, O.
- Iselin, R. A.** An inexpensive well microtome for laboratory use. *Calif. Fish Game* **47** : 419-420 1 fig.
- Itazawa, Y.** *see* Amemiya, I.
- Izuka, S.** *see* Tanaka, O.
- Jägerstern, G.** *see* Nilsson, L.
- James, J. W.** Selection in two environments. *Heredity* **16** : 145-152.
- Janković, M.** Die Einwirkung der Trockenlegung der Fischteich über Winter auf die Entwicklung der Bodenfauna. *Bull. Mus. Hist. nat. Belgrade* **16b** 1960 : 105-113. [German summary.]
- Jefferson, G. T.** *see* Brough, J.
- Jensen, D. D.** Operation and the question "Is this behaviour learned or innate?" *Behaviour* **17** : 1-8.
- Jensen, K. W.** *see* Elster, H. J.
- Jirovec, O. R. N.** Dr. Otto Havlík (1923-1960). *Vestn. českosl. zool. Společ.* **25** I : 1-4 1 fig.
- Job, S. V.** A device for measuring the oxygen consumption of small organisms. *J. anim. Morph. Physiol.* **7** 1960 : 170-172.
- John, H. J.** Jan Evangelista Purkyně. Czech scientist and patriot 1787-1869. *Mem. Amer. phil. soc.* **49** 1959 : 1-94 26 figs.
- Jones, M. L.** A quantitative evaluation of the benthic fauna off Point Richmond, California. *Univ. Calif. Publ. Zool.* **67** : 219-320 30 figs.
- Jones, O. G.** The new animal hospital and quarantine station at the London Zoo. *Int. Zoo Yearb.* **1** 1959 (1960) : 47-50.
- Jonge, J. de.** Het Natuurhistorische Museum te Groningen. *Natura, Amst.* **58** 6 : 78-80 3 figs.
- Julien, M. H.** *see* Bonnin, J.
- Jura, C.** Mechanism and significance of the ooplasmic segregation in the beginning of development. *Przegl. zool.* **4** 1960 : 183-190 6 figs.
- Jurgenson, P. B.** The role of Academician A. F. Middendorf in the advances of Russian zoogeography. *Byull. Mosk. Obshch. Isp. Prir. Otd. Biol.* **66** I : 138-149 portr.
- Jutisz, M. & La Llosa, P. De.** Relations entre la structure chimique et l'activité biologique des hormones hypophysaires. *Année biol.* (3) **37** : 81-105.
- Jutras, P. J. & Tarjan, A. C.** A two-component apparatus for constructing Cobb metal slides for microscope mounts. *J. Parasit.* **47** : 369-371 2 figs.
- Kaczmarek, W.** On the role of euryecious species in biocenotic regulation phenomena. *Bull. Acad. polon. Sci. Sér. Sci. biol.* **9** I : 41-45 4 figs.
- Kagan, I. G.** Gel-diffusion techniques for the analysis of parasitic materials. *Proc. helminth. Soc. Wash.* **28** 97-102.

- Kahan, D.** The fauna of the hot springs of Israel. Bull. res. Coun. Israel 9 B 4: 212.
- Kamler, E. & Riedel, W.** A method for quantitative study of the bottom fauna of Tatra streams. Polak. Arch. Hydrobiol. 8 1960: 95-105 7 figs.
- Kaneva-Abadjieva, V. & Marinov, T. M.** Verteilung des Zoobenthos vor der bulgarischen Schwarzmeerküste. Trud. tsentr. nauch.-izal. Inst. Rib. Varna 3: 117-161.
- Kanwisher, J.** see Wieser, W.
- Kappeler, M. A.** Pilati montis historiá, Naturgeschichte des Pilatusberges. Deutsche Übersetzung des 1767 erschienenen Werkes. Mitt. naturf. Ges. Luzern. 18 1960: 1-255 7 pls.
- Karaszowska, K. & Mikulski, J. S.** Studies of animal aggregations associated with immersed and pleustonic vegetations in Lake Druzno. Ekol. Polaka 8A 16 1960: 335-353 2 figs. [English summary.]
- Kasyanenko, V. G.** Principles of a phylogenetic change in the organs and their importance for the physiological essence of evolutionary transformations of the organs and systems. Zool. Zh. 40 (12): 1759-1769.
- Kayser, Ch.** The physiology of natural hibernation. London (Pergamon Press): pp. vii, 325, text illust.
- Kellecher, T. M.** see Kojima, K. I.
- Kelley, D. W.** see Cordone, A. J.
- Kimata, M. & others.** The method for sampling of marine bottom muds. Bull. jap. Soc. Sci. Fish. 26 1960: 1227-1230 2 figs.
- Kimura, M.** Natural selection as the process of accumulating genetic information in adaptive evolution. Genet. Res. 2: 127-140 2 figs.
- Kiriakoff, S. G.** L'introggression et la spéciation animale. Ann. Soc. zool. Belg. 90 1959-60 (1960): 233-246.
- Kiselite, T. S.** Zooplankton of some lakes of North West Lithuania. Trud. Akad. Nauk Lith.SSR. ser B. 1 (24): 111-124 4 figs. [In Russian.]
- Kitazawa, Y., Kurasawa, H., Nakamura, M. & Kondo, M.** Ecology of soil animals of the primeval forest of Mt. Takakuma and Mt. Kirishima. Misc. Rep. Res. Inst. nat. Resour. Tokyo No. 54-55: 110-118.
- Klapper, H.** Die Eutrophierung von Trinkwassersperren und ihre möglichen Auswirkungen, dargestellt am Beispiel der Saldenbachalsperre. Wiss. Z. K.-Marx-Univ. Leipzig. Math.-Nat. R. 10 1: 81-87 4 figs.
- Klein, B. M.** Die "Eigenwilligkeit" der Golgi-Methode. Mikrokosmos 50: 302-305, 5 figs.
- Klimek, E.** see Bourcart, J.
- Klomp, H.** The concepts "similar ecology" and "competition" in animal ecology. Arch. néerl. Zool. 14: 90-102.
- Knapp, E. P.** see Mendes, E. G.
- Knapp, R. J.** see Waters, T. F.
- Knox, G. A.** The study of marine bottom communities. Proc. Roy. Soc. N.Z. 89: 167-182.
- Koga, F.** see Tanaka, O.
- Kohlmayer, J.** San Juan Island—eine Pazifik-Insel im Nordwesten der U.S.A. Natur u. Volk 91: 359-370, 11 figs.
- Kojima, K.** Effects of dominance and size of population on responses to mass selection. Genet. Res. 2: 177-188 1 fig.
- Kojima, K. I. & Kellecher, T. M.** Changes of mean fitness in random mating populations when epistasis and linkage are present. Genetics 46: 527-540.
- Koller, P. C.** The mechanism of mutation. Bull. nat. Inst. Sci. India No. 7 1955: 168-172.
- Komender, J.** see Ostrowski K.
- Kondo, M.** see Kitazawa, Y.
- Koppányi, T.** Zu den Fragen der bioökologischen Forschungen. Acta zool., Budapest 7: 191-211.
- Kotarba, I.** Zoo in Opole. Przegl. Zool. 4 (3) 1960: 228-231.
- Kovács, T.** see Kóvér, A.
- Kovalsky, V. V. & Letunova, S. V.** The role of phyto- and zooplankton of waterbodies in the cobalt migration. Zool. Zh. 40 (6): 809-817.
- Kóvér, A. & Kovács, T.** Investigations on the physiological role of myosincholesterase in phylogenesis. J. cell. comp. Physiol. 57 2: 73-79, 3 figs (not seen).
- Kozhov, M. M.** On species formation in the Baikal Lake. Byull. Mosk. Obsch. Isp. Prir. Otd. Biol. 65 6 1960: 39-47. [English summary.]
- Kozhov, M. M. & Tjumenzev, N. V.** On the biological sequences of the level variations in the Baikal Lake. Byull. Mosk. Obsch. Isp. Prir. Otd. Biol. 66 3: 32-39 3 figs. [English summary.]
- Krajchkin, B. V.** see Bodrova, N. V.
- Kremer-Dijkzen, I. M. G.** Het Texels Museum als voorlichtingscentrum voor natuurstudie. Natura, Amst. 58: 76-77.
- Krey, J.** Der Detritus in Meere. J. Cons. Int. Explor. Mer 26: 263-280 2 figs.
- Krievs, N. K.** see Nikolaev, I. J.
- Krnjević, K.** The transmission of nerve impulse. Sci. Survey 2: 190-204 5 figs.
- Kroeger, H.** Eine Hypothese zum Mechanismus der physiologischen Genaktivierung. Verh. dtsh. zool. Ges. 1960 1961: 292-297 2 figs.
- Krumbiegel, I.** Die Rudimentation. Eine monographische Studie. Stuttgart. (Gustav Fischer Verlag) 1960: pp. vii, 144 text figs.
- Kruijter, E. M. (1).** Het Natuurhistorische Museum van Maastricht. Natuurh. Maandbl. 49 9-12 1960: 95-99, 3 figs.
- Kruijter, E. M. (2).** Het Natuurhistorische Museum van Maastricht. Natura, Amst. 58: 71-75 3 figs.
- Krysiak, K.** The department of animal anatomy of the Central School of Agriculture, Warsaw. Acta theriologica 4: 297-301.
- Kühnelt, W. (1).** Inhalt und Aufgaben der Festland-ökologie (Epeirologie). Anz. öst. Akad. Wiss. 97 1960: 52-61.
- Kühnelt, W. (2).** Soil biology, with special reference to the animal kingdom. Translated by N. Walker. London (Faber & Faber) pp. 397, 4 pls. text figs. [Orig. title—Bodenbiologie, Wien 1950.]
- Kuiper, K.** Verleden, heden en toekomst van de biologische raad. Vakbl. Biol. 41 4: 53-63.
- Kurasawa, H.** see Kitazawa, Y.

- Kurohagi, T. (1).** Studies on the annual succession of the plankton organisms in Lake Shikotsu, Hokkaido (I). Quantitative succession of the plankton organisms at an offshore station of Lake Shikotsu, May, 1952-June 1957. *Sci. Rep. Hokkaido Salm. Hatch. No. 12* 1958: 97-110 5 figs. 1 pl.
- Kurohagi, T. (2).** On the plankton of Lake Chimikappu-ko in eastern Hokkaido. *Sci. Rep. Hokkaido Salm. Hatch. No. 14* 1959: 193-210 4 figs. 7 pls.
- Kurohagi, T. & Sasaki, S.** Seasonal changes of vertical distribution of zooplankton in Lake Shikotsu, Hokkaido. *Sci. Rep. Hokkaido Salm. Hatch. No. 13* 1959: 51-55 9 figs.
- Kosmorskaya, A. P. (1).** Zooplankton of the frontal zone in the North Atlantic in the spring of 1958. *in* Marti, Yu. Yu. & others. Soviet fisheries investigations in North European seas. Moscow (All-Union Research Institute of Marine Fisheries and Oceanography (VNIRO) 1960: 139-153.
- Kosmorskaya, A. P. (2).** Distribution of plankton in the North Atlantic in spring and autumn 1958. *Rapp. Cons. Explor. Mer* 149: 183-188 7 figs.
- Kusnezov, N.** Das Gesetz der Ungleichmässigkeit der Entwicklung in der Evolution. *Acta biotheor.*, Leiden 14: 43-60 1 fig.
- Laborel, J.** Contribution à l'étude directe des peuplements benthiques, sciaphales sur substrat rocheux en Méditerranée. *Rec. Trav. Sta. mar. Endoume No. 33*. (Bull. No. 20) 1960: 117-173 16 figs.
- Laborel, J., Pérès, J. M., Picard, J. & Vacelet, J.** Étude directe des fonds des parages de Marseille de 30 à 300 m avec la soucoupe plongeante Cousteau. *Bull. Inst. Oceanogr. Monaco No. 1206*: 1-16 5 pls.
- Lack, D.** A survey of the conflict between evolutionary theory and Christian belief. *Proc. roy. Inst. Gr. Brit.* 38 1960: 303-311.
- Lagler, K. F.** *see* Vibert, R.
- La Llosa, P. de** *see* Jutisz, M.
- Lamotte, M. & Roy, R.** La zonation de la faune au mont Nimba (Guinée). *C. R. Acad. Sci., Paris* 252: 4040-4042.
- Landin, B.-O.** Critical comments upon some nomenclatorial and synonymical questions. *Ent. Tidsk.* 78 1957: 101-114.
- Landowski, J.** II—International Symposium on Zoo Animals pathology, Warsaw, 10-14 June, 1960. *Przegl. zool.* 5 74-76 1 fig.
- Lang, J.** Za doc. dr. Bozenou Folkmanovu. *Mém. Soc. Zool. Tchécosl.* 25 (2): 184-187 1 fig.
- Langenheim, J. H.** *see* Mason, H. L.
- Lanyon, W. E. & Tavoila, W. N.** Animal sounds and communication. *Publ. Amer. Inst. biol. Sci.*, No. 7 1960; pp. xiii, 443, text illust., + 12 in./334 r.p.m. recording.
- Zasinski, W.** The IVth conference of Czechoslovakian morphologists at Hradec-Kralove on September 15-17th 1960. *Folia morph., Warszawa* 11 1960: 297-298.
- Lasnitzki, I.** Use of animal cell, tissue and organ cultures in radiobiology. *Nature, Lond.* 191: 340-342.
- Lauff, G. H., Cummins, K. W., Eriksen, C. H. & Parker, M.** A method for sorting bottom fauna samples by elutriation. *Limnol. Oceanogr.* 6: 462-466 1 fig.
- Laun, H. C.** Projecting small organisms with a 35 mm. slide projector. *Turtos News* 39: 198-199 2 figs.
- Leclercq, J.** Un palmarès des grands zoologistes. *Ann. Soc. Zool. Belg.* 91 1960-1961 (1961): 21-27.
- Leentvaar, P. (1).** Waarnemingen in het Biesbosch-complex. *Levende Nat.* 63 1960 276-283 7 figs.
- Leentvaar, P. (2).** De hydrobiologische toestand van de Selzerbeek tussen Vaals en Gulpen. *Levende Nat.* 63 1960: 156-161.
- Legand, M.** Aspects des recherches océanographiques dans le Pacifique sud, quelques résultats biologiques. *Cahiers pacif. No. 3*: 1-52 3 pls. 14 figs.
- Lehmann, H.** Quelques aspects du caractère universel de l'œuvre d'Alexander de Humboldt. *Arch. Mus. Hist. nat. Paris* (7) 7 1960: VIII-XV portr.
- Lenz, F.** August Thienemann. *Verh. dtsch. zool. Ges.* 1960: 534-536.
- Lerma, B. de.** Física e biologia. Considerazioni intorno alla natura del gene. *Boll. Zool.* 26 (2) 1959 77-86.
- Leslie, D.** *see* Needham, J.
- Leslie, I.** Biochemistry of heredity: a general hypothesis. *Nature, London*, 189: 260-268 2 figs.
- Lefunova, S. V.** *see* Kovalsky, V. V.
- Lie, U.** Zooplankton in relation to herring in the Norwegian Sea, June 1959. *Fiskeridir. Skr. Havundersøk.* 13 (1): 1-14, 8 figs.
- Lieftinck, M. A.** In memoriam F. C. Drescher (1874-1957). *Ent. Ber., Amst.* 18 2 1958: 17-18.
- Lillelund, K. (1).** Das Netzplankton des Schlendorfer Binnensees. *Z. Fisch., N.F.* 9 1960: 365-406 12 figs.
- Lillelund, K. (2).** Grundlagen der Sedimentationsvorgänge und ihre Bedeutung für die Bodenproduktion. *Z. Fisch., N.F.* 9 1960: 417-424.
- Lin, J. Y.** *see* Gurjanov, E. F.
- Lindgren, E.** Natural history notes from Jigalong. v. Aboriginal flora and fauna names. *W. Aust. Nat.* 7 195-201.
- Lindgren, P. E.** About the effect of rotenone upon benthonic animals in lakes. *Rep. Inst. freshw. Res. Drottningh. No. 41* 1960: 172-184.
- Lindquist, A.** Studien über das Zooplankton der Bottensee I & II. *Rep. Inst. mar. Res. Lysekil. (Biol.) No. 11*, 1959:
- Lindsey, J. S.** Leonard Meese Llewellyn 1907-1960. *J. Wildl. Mgmt.* 25: 351 1 fig.
- Liven, A. N.** Über die Innervation der Speiseröhre bei Wirbeltieren und Mensch. *Z. mikr. anat. Forsch.* 67 441-451.
- Ljakhov, S. M.** Bottom fauna of Volga and its seasonal distribution near Kuibyshev. *Trud. Inst. Biol. Vodochr. No. 3(b)* 1960: 106-128 3 figs. [In Russian.]
- Loewenstein, W. R.** Excitation and inactivation in a receptor membrane. *Ann. N.Y. Acad. Sci.* 94: 510-534 23 figs.
- Longfield, C.** Cyril Leslie Collenette—Obituary (1888-1959). *Ent. Mon. Mag.* (4) 20 1959: 276.
- López, E. A.** La especie en "The Origin of Species". *Bol. Soc. esp. Hist. nat. Secc. Biol.* 59: 5-24.
- Lorena, K.** Phylogenetische Anpassung und adaptive Modifikation des Verhaltens. *Z. Tierpsychol.* 18: 139-187.

- Lozano Cabo, F.** Don Francisco de Paula Navarro Martin (1898-1960). *Bol. Inst. esp. Oceanogr.* No. 103 iii-xvii.
- Luferova-(Lochanina), L. A.** The influence of hydroelectric power station on the zooplankton in Gorky reservoir. *Byull. Inst. Biol. Vodochr.* No. 6 1960 : 38-39. [In Russian.]
- Lukanin, V. S.** Coprometer for aquatic invertebrata. *Byull. Inst. Biol. Vodochr.* No. 7 1960 : 51-54 1 fig. [In Russian.]
- Lukanin, V. S. Poddubnaja, T. L. & Tsikhon-Lukanina, E. A.** Container for studies on aquatic invertebrata nutrition. *Byull. Inst. Biol. Vodochr.* No. 7 1960 : 55-56 1 fig. [In Russian.]
- Lukasiewicz, K.** Michel Coxie et ses figures d'animaux des tapisseries jagellonnes. *Zoo, Antwerp* 26 : 119-125 8 figs.
- Lüling, K. H.** Fische und andere Tiere aus dem "Oriente" Perus III. *Aquar. Terrar. Z.* 14 : 206-208.
- Luna, J. J. R.** La fauna guatemalteca. *An. Soc. Geogr. Hist. Guatemala* 33 1-4 1959 : 152-158.
- Mabbatt, F. S. III.** San Diego's museum of the future. *Mus. News* 39 4 : 14-17 7 figs.
- McAllister, C. D.** Zooplankton studies at Ocean Weather Station "P" in the northeast Pacific Ocean. *J. Fish. Res. Bd. Can.* 18 : 1-29 19 figs.
- Macan, T. T.** Factors that limit the range of freshwater animals. *Biol. Rev.* 36 : 151-198 3 figs.
- MacConaill, M. A. & Gurr, E.** Neurokeratin network of myelin sheaths. *Nature, Lond.* 188 1960 : p. 1122.
- MacConaill, M. A.** see Gurr, E.
- McElroy, W. D.** see Seliger, H. H.
- McErlan, A. J. & Phillips, R. C.** A technique for direct photography of translucent objects. *Trans. Amer. Fish. Soc.* 90 : 500-501 2 figs.
- Macfadyen, A. (1).** A new system for continuous respirometry of small air-breathing invertebrates under near-natural conditions. *J. exp. Biol.* 38 : 323-341 11 figs.
- Macfadyen, A. (2).** Metabolism of soil invertebrates in relation to soil fertility. *Ann. appl. Biol.* 49 : 215-218 2 figs.
- Mackay, R. D.** New museum technique for displaying soft-bodied animals. *Aust. Mus. Mag.* 13 : 338-339 1 fig.
- McKie, D.** Some notes on a student's scientific society in eighteenth century Edinburgh. *Sci. Progr.* 49 : 228-241.
- McMichael, D. F. & Whitley, G. P.** A bibliography of Charles Francis Laepron with an index to his new genera and species. *Proc. R. zool. Soc. N.S.W.* 1958-59 (1961) : 114-130 1 fig.
- McNeely, R. L. & Pereyra, W. T.** A simple screening device for the separation of benthic samples at sea. *J. Cons. Int. Explor. Mer* 26 : 259-262 3 figs.
- Mainx, F.** Populationsgenetik. *Fortachr. Zool.* 13 : 366-397.
- Makaveeva, E. B.** (Biocenosis of *Cystoseira barbata* in the part of the Black Sea littoral.) *Trav. Sta. biol. Sebastopol* 12 1959 : 168-191 13 figs.
- Mălăcea, I.** Ecologic investigations regarding the succession of organism populations in the course of the process of self-purifying of residual diffusion water in the reservoirs of a sugar refinery. *Comun. Zool., Bucuresti* 1959 1960 : 9-37.
- Malhotra, S. K. (1).** A comparative histochemical study of the "Golgi" apparatus. *Quart. J. micr. Sci.* 102 : 83-87.
- Malhotra, S. K. (2).** Coloration of the Golgi-Nissl network in a vertebrate neurone by Sudan black. *Quart. J. micr. Sci.* 102 : 387-389 1 fig.
- Mallet, L.** Recherche des hydrocarbures polycycliques du type benzo-3,4 pyrène dans la faune des milieux marins (Manche, Atlantique et Méditerranée). *C. R. Acad. Sci., Paris* 253 : 168-170.
- Mallion, K. B.** see David, G. B.
- Manikowski, W.** Polish macroplankton observations in 1959. *Ann. Biol., Copenhagen* 16 1959 (1961) : 83.
- Mann, F. G.** Regiones biogeográficas de Chile. *Invest. zool. chil.* 6 1960 : 15-49 figs.
- Manton, S. M.** Locomotion and evolution in terrestrial arthropods. *Bull. nat. Inst. Sci. India* No. 7 1955 : 143-156 6 figs.
- Margalef, R. (1).** Un modelo para el estudio de la distribución de organismos de gran dispersabilidad y área de reproducción muy localizada. *Invest. Pesq.* 7 1957 : 117-125 2 figs.
- Margalef, R. (2).** Communication of structure in plankton populations. *Limnol. Oceanogr.* 6 : 124-128, 1 fig.
- Marino, T. M.** see Kaneva-Abadjieva, V.
- Marks, E. N.** A history of the Queensland Philosophical Society and the Rogue Society of Queensland from 1859 to 1911. *Proc. roy. Soc. Qd.* 71 1960 : 17-42.
- Marler, P.** The filtering of external stimuli during instinctive behaviour. in Thorpe, W. H. & Zangwill, O. L., Current problems in animal behaviour. London (Cambridge University Press) : 150-166.
- Marriott, F. R. C.** The sensitivity limits of photo-receptors. *Symp. zool. Soc. Lond., No. 3* 1960 : 67-83 8 figs.
- Martin del Campo, M. en. C. R.** Contribucion a la etnozoológica Mixteca y Zapoteca. *Mem. Acad. Cienc. "Ant. Alzate"* 59 1-2 1960 : 53-58.
- Mason, H. L. & Langenheim, J. H.** Natural selection as an ecological concept. *Ecology* 42 : 158-165.
- Massuti, M.** La gamba (*Parapenaeus longirostris* Lucas). Primeras observaciones en los caladeros del Golfo de Cadiz y Africa Occidental. *Invest. Pesq.* 15 1959 : 51-80 8 figs.
- Matheson, C.** see Brough, J.
- Mattisson, A. G. M. (1).** Flavins in some types of invertebrate muscles. *Ark. Zool. Ser.* 2 13 : 545-552, 5 figs.
- Mattisson, A. G. M. (2).** The effect of inhibitory and activating substances on the cellular respiration of some types of invertebrate muscles. *Ark. Zool. Ser.* 2 13 : 447-474 3 figs.
- Matveyev, B. S.** On the dependence of the development of the vertebrate brain upon the developmental rate of the sense organs and the conditions of existence. *Zool. Zh.* 40 (12) : 1778-1794 9 figs.

- Maubeuge, P. L.** Historique de la Société des Arts de Nancy et de la Société Lorraine des Sciences. Bull. Soc. Lorraine Sci. 1 1 1960 : 39-52.
- Medawar, P. B.** A commentary on Lamarckism. Bull. nat. Inst. Sci. India No. 7 1955 : 127-141.
- Mendes, E. G. & Knapp, E. P.** A survey of haem compounds in invertebrates using the benzidine test. Bol. Fac. Filos. Cienc. S. Paulo (Zool.), No. 21 1957 (1958) : 69-83.
- Menzel, D. W. & Ryther, J. H.** Zooplankton in the Sargasso Sea off Bermuda and its relation to organic production. J. Cons. Int. Explor. Mer 26 250-258 3 figs.
- Menzies, R. J.** *see* Hunkins, K. L.
- Merio, S.** Distribuzione e frequenza del plancton del lago di Garda. Boll. Zool. 26 (2) 1959 : 383-396 4 figs.
- Mikulski, J. S.** *see* Karassowska, K.
- Milne, L. J.** *see* Buchsbaum, R.
- Milojević, B. D.** Basic problem and evolutionary mechanism in the animal social life. Contribution to experimental evolutionism. Bull. Acad. Serbe Sci. Cl. Sci. Math. Nat. 26 : 41-58.
- Milyutina, G. A.** *see* Timofeev-Resovskii, N. V.
- Mizuno, T.** The plankton and the environmental conditions of the freshwater ponds on the coast of the Inland Sea. Jap. J. Limnol. 19 2 1957 : 72-75 1 fig.
- Mokyeveski, O. B. (1).** Geographical zonation of marine littoral types. Limnol. Oceanogr. 5 1960 : 389-396 1 fig.
- Mokyeveski, O. B. (2).** The littoral fauna of the north western coast of the Japanese Sea. Trud. Inst. Okeanol. 34 1960 : 242-328 9 figs.
- Molinier, R.** Étude des biocénoses marines du Cap Corse (France). Vegetatio 9 3-5 1960 : 119-312 21 figs. Rec. Trav. Sta. mar. Endoume No. 35 1961.
- Monchadsky, A. S.** The concept of factors in ecology. Zool. Zh. 40 (9) : 1299-1303.
- Monné, L.** On the physiological role of the polyphenols in cell and tissue envelopes. Ark. Zool. Ser. 2 13 : 287-298.
- Montgomery, G. G.** A modification of the nicotine dart capture method. J. Wildl. Mgmt. 25 : 101-102.
- Mookerjee, H. K.** Embryological evidences of organic evolution from the study of the development of the chordate centrum. Bull. nat. Inst. Sci. India No. 7 1955 : 198-208.
- Mookerjee, S.** Organization in evolutionary designs. Bull. nat. Inst. Sci. India No. 7 1960 : 69-78.
- Mordukhai-Boltovskoi, F. D. (1).** Caspian fauna in the basin of the Azov and Black Seas. Moskva and Leningrad (Izdatel'stvo Akademii Nauk S.S.S.R.) 1960 pp. 286 (2) text figs.
- Mordukhai-Boltovskoi, F. D. (2).** Catalogue of free-living invertebrate fauna of the Sea of Azov. Zool. Zh. 39 (10) 1960 : 1454-1466.
- Mordukhai-Boltovskoi, F. D. & Poddubnaja, T. L.** Über die Winteruntersuchungen der Bodenfauna in dem Wolga-Vormündungsbezirke des Rybinsk-Stausees. Byull. Inst. Biol. Vodochr. No. 2 1958 : 11-15 1 fig. [In Russian.]
- Moreau, R. E.** Taxonomic realism. Proc. zool. Soc. Lond. 137 : 623-626.
- Morton, A. G.** The inheritance of adaptive modifications. Bull. nat. Inst. Sci. India No. 7 1955 : 57-61.
- Muratori, G.** Istofisiologia comparata delle zone aortico-arteriose pressoresettive e degli annessi dispositivi chemorecettori (paraganglio carotico, paraganglio scapulo-clavico, paraganglio aortico-polmonare). Monit. Zool. Ital. Suppl. 68 1960 : 17-84, 27 figs.
- Nakai, Z., Fukai, R. & others.** Radioactivity of marine organisms and sediments in the Tokyo Bay and its southern neighbourhood. in Radio-active contamination of marine products in Japan. 8th Session, Sci. Comm. Effects atom. Rad., U.N. 1960 : 18-38.
- Nakamura, M.** *see* Kitazawa, Y.
- Nakazawa, S.** After the origin of life. Acta biotheor., Leiden 14 : 29-42.
- Nalbandoglou, Ü.** *see* Acara, A.
- Narbel-Hofstetter, M.** L'origine de la parthénogénese. Bull. Soc. vaud. Sci. nat. 67 357-368.
- Nassimovich, A. A.** Some general problems and results of acclimatization of terrestrial animals. Zool. Zh. 40 (7) : 957-970.
- Nath, V.** Evolution of the acrosome in the animal sperm and its degeneration in certain species. Bull. nat. Inst. Sci. India No. 7 1955 : 209-212.
- N.D.R.** New Nature Reserves. Entomologist 91 1958 : 166.
- Needham, J. & Leslie, D.** Ancient and mediaeval Chinese thought on evolution. Bull. nat. Inst. Sci. India No. 7 1955 : 1-18.
- Negoro, K.** The plankton of Lake Ibanaike (or Nakanoumi) as trophic indicators. Jap. J. Limnol. 19 1957 : 68-71.
- Nesic, K. N.** Changes in the Barents Sea bottom fauna under the influence of fluctuations in the hydrological regime (along the section on the Kola Meridian). in Marti, Yu. Yu. & others. Soviet fisheries investigations in North European seas. Moscow (All-Union Research Institute of Marine Fisheries and Oceanography (VNIRO)) 1960 : 129-138.
- Neves, C. M. B.** Protection des animaux rares et menacés au Portugal. Terre et la Vie 1959 Suppl. 1959 : 26-30.
- Nicol, D.** Biotic associations and extinction. Syst. Zool. 10 : 35-41.
- Nicol, J. A. C.** Luminescence in marine organisms. Rep. Smithsonian. Instn. 1960 : 447-456 4 pls. 1 fig.
- Nijhoff, P.** *see* Hennipman, E.
- Nikolaev, I. I. & Krievs, N. K.** Quantitative estimation of plankton in the central Baltic and the Gulf of Riga in 1959. Ann. Biol., Copenhagen 16 1959 (1961) : 84-86 3 figs.
- Nilsson, L. & Jägersten, G.** Life in the sea. London (G. T. Foulis) pp. 184, text illus. (incl. col.).
- Noble, E. R. & G. A.** Parasitology. The biology of animal parasites. London (Henry Kimpton) pp. 767 4 pls. (3 col.), 1 chart, text illus.
- Nonato, E. & Pêres, J.-M.** Observations sur quelques peuplements intertidaux de substrat dur dans la région d'Ubatuba (Etat de São Paulo). Cah. Biol. Mar. 2 3 : 263-270.
- Novatti, R.** El paisaje Antártico. Sus plantas y sus animales. Contr. Inst. Antarct. argent. No. 5 1959 : 1-14 4 figs.

- Olsachei, J.** El nuevo Museo Provincial de Ciencias Naturales "Bartolome Mitre" de Córdoba. *Rev. Fac. Cienc. Córdoba. Ser. Cienc. nat.* 19 3-4 1957: 1-8 5 pl.
- Oomen, H. C. J.** *see* Geelen, J. F. M.
- Opinion 592.** Rejection of Bertrand, 1763, Dictionnaire Universel des fossiles propres et des fossiles accidentels. *Bull. zool. Nomencl.* 18 (2): 114-120.
- Orcel, J.** Les vues générales d'Alexander de Humboldt Son amitié pour le Muséum. *Arch. Mus. Hist. nat. Paris* (7) 7 1960: xvi-xvii portr.
- Orlikowska, C.** First biological experiments with radium due to Poles—Jan Danyasz and Jan Tur. *Przegl. zool.* 6 (4): 311-315 fig.
- Ostroumov, A. G.** The use of aerial observations for the numerical estimation and the distribution of some fauna representatives in Kamchatka. *Byull. Mosk. Obshch. Isp. Prir. Otd. Biol.* 66 3: 25-31.
- Ostrowski, K. & Czekaliński, L.** New model of apparatus for rotatory tissue culture. *Folia morph., Warszawa* 11 1960: 101-105 3 figs.
- Ostrowski, K. & Komender, J.** Draft apparatus for lyophilisation of tissues. *Folia morph., Warszawa* 11 1960: 171-175.
- Palkovits, M. & Csapo, S.** Mikroprojektions-Messstisch für die Vereinfachung von Kernvariationsuntersuchungen. *Z. mikr. anat. Forsch.* 67: 339-342.
- Paluska, E.** *see* Smetana, R.
- Panouse, J. B.** Animaux rares et menacés de la fauna du Maroc. *Terre et la Vie* 1959 Suppl. 1959: 66-67.
- Pantin, C. F. A.** Functional morphology and evolutionary morphology. *Bull. nat. Inst. Sci. India* No. 7 1955: 29-34 3 figs.
- Parchevski, V. P.** *see* Akamsin, A. D.
- Parker, M.** *see* Lauff, G. H.
- Parr, A. E.** Dimensions, backgrounds, and uses of habitat groups. *Curator* 4: 199-215 17 figs.
- Parsons, P. A.** The initial progress of new genes with viability differences between sexes and with sex linkage. *Heredity* 16: 103-107.
- Parsons, T. R.** *see* Strickland, J. D. H.
- Patten, B. C.** Preliminary method for estimating stability in plankton. *Science, N.Y.* 134: 1010-1011.
- Paulian, R.** *see* Delamare Deboutteville, C.
- Pavlovsky, E. N.** The tasks of zoology in relation to the Resolution of the Plenum of the CPSU taken on January 18, 1961, and to the forthcoming XXII Congress of the CPSU. *Zool. Zh.* 40 (9): 1277-1290.
- Pavshitski, E. A. & Grusov, L. N.** Distribution of plankton in the Norwegian Sea in 1958. *Rapp. Cons. Explor. Mer* 149: 176-178 2 figs.
- Payne, H. C.** Our National Parks. *Afr. Wild Life* 15: 181-190, 5 figs.
- Peabody, F. E.** Annual growth zones in living and fossil vertebrates. *J. Morph.* 108: 11-62 69 figs.
- Peacock, A. D. & Weidmann, U.** Recent work on the cytology of animal parthenogenesis. *Przegl. zool.* 5: 5-27 & 101-122, 4 figs. 2 pls. [In Polish with English summary.]
- Pérez, J. M. (1).** Aperçu bionomique sur les communautés benthiques des côtes sud du Portugal. *Res. Sci. Camp. F.A.I.A.L. No. 1* 1957: 1-35 15 figs. *See* Rec. Trav. St. mar. Endoume No. 32 1960.
- Pérez, J. M. (2).** Observations sur les sédiments à partir du bathyscaphe F.N.R.S. III ou par photographies profondes. *Rec. Trav. Sta. mar. Endoume No. 33* (Bull. No. 20) 1960: 25-27.
- Pérez, J. M. (3).** Le bathyscaphe, instrument d'investigation biologique des mers profondes. *Rec. Trav. Sta. mar. Endoume No. 33* (Bull. No. 20) 1960: 17-24.
- Pérez, J. M.** *see* Laborel, J.
- Pérez, J. M.** *see* Nonato, E.
- Pérez, J. M. & Picard, J. (1).** Considerations sur l'étagement des formations benthiques. *Rec. Trav. Sta. mar. Endoume No. 33* (Bull. No. 20) 1960: 11-16.
- Pérez, J. M. & Picard, J. (2).** Origine, distribution et modifications récentes du peuplement de la mer Méditerranée. *Rec. Trav. Sta. mar. Endoume No. 33* (Bull. No. 20) 1960: 29-33.
- Pereyra, W. T.** *see* McNeely, R. L.
- Perlmutter, A.** Possible effect of lethal visible light on year-class fluctuations of aquatic animals. *Science N.Y.* 133: 1081-1082.
- Peters, J. A.** Type locality restrictions in nomenclatorial procedure. *Copeia* 1961 No. 3: 352-353.
- Peters, W.** Methoden zur Herstellung von Aufhellungspräparaten. *Zool. Anz.* 167: 233-240 6 figs.
- Petrides, G. A.** Wild life preservation and national parks in Ethiopia. *Wild Life, Nairobi* 3 (3): 24-26.
- Pettit, L.** Current Soviet outlook on the inheritance of acquired adaptations. *Ohio J. Sci.* 61: 147-150.
- Petzold, H. G.** Im Tierpark Berlin 1955 vorhandene Tierarten. "Milu" 1 1960 1-14 13 figs.
- Phillips, R. C.** *see* McElean, A. J.
- Picard, J.** *see* Laborel, J.
- Picard, J.** *see* Pérez, J. M.
- Pieper, W.** Veröffentlichungen der Naturhistorischen Gesellschaft, Hannover, seit 1859. *Ber. naturh. Ges. Hannover* No. 105: 63-84.
- Pisareva, L. N.** *see* Zhirmunsky, A. V.
- Poddubnaja, T. L.** *see* Lukanin, V. S.
- Poddubnaja, T. L.** *see* Mordukhai-Boltovskoi, F. D.
- Polikarpov, C. G.** *see* Akamsin, A. D.
- Polina, R. I.** *see* Bukhman, M. P.
- Pope, K.** *see* Whitley, G. P.
- Popescu, E.** Observations sur le plancton de la région amont du bas Danube (Km 1042-Km 957). *Bul. Inst. Cercet. Pisc. Rom.* 19 (3) 1960: 5-17.
- Popovici-Bănosano, A.** Sur les convergences dans la région animal. *Ekol. Polska* 8 A 1 1960: 1-20.
- Popovská, P. (1).** Verunreinigung des Moldau-Flusses unterhalb Prag. *Věstn. českosl. zool. Společ.* 24 1960: 355-360.
- Popovská, P. (2).** Kvantitativé (sic) Studie der Bettsohle der Moldau (Vltava) unterhalb Prags. *Věstn. českosl. zool. Společ.* 25: 93-104.
- Pora, A. E.** L'homéorapie, une notion à préciser dans la physiologie écologique des animaux aquatiques. *Rapp. Comm. int. Mer Médit.* 15 (3) 1960: 171-188, 7 figs.

- Portmann, A.** Animal camouflage. Ann Arbor (University of Michigan Press) 1959: pp. 111, 101 figs.
- Poso Lora, R.** Los factores alimenticios en la reproducción animal. Arch. Zootecn. 7 (25) 1958: 16-56.
- Precht, H.** Temperaturanpassungen bei wechselwarmen Tieren. Verh. dtsh. zool. Ges. 1960: 38-60 11 figs.
- Purday, C.** see Wisely, B.
- R.C. Arthur Stannard Vernay.** J. Bombay nat. Hist. Soc. 58: 249-250.
- Radovanović, M.** Résultats des recherches faites dans les îles Adriatiques sous le jour de l'évolutionnisme. Bull. Acad. Serbe Sci. Cl. Sci. Math. Nat. 26: 59-90 5 figs. 4 maps.
- Radovich, J.** Relationships of some marine organisms of the northeast Pacific to water temperatures particularly during 1957 through 1959. Fish. Bull., Sacramento No. 112: 1-62 13 figs.
- Raikov, I. B.** see Bukhman, M. P.
- Ramón y Cajal, S.** Studies on vertebrate neurogenesis translated by Lloyd Guth. Springfield Ill. (Charles C. Thomas) 1960: pp. xiv, 432 frontis. text figs. (originally publ. Madrid 1929, as "Études sur la neurogenèse de quelques vertébrés.")
- Rand, R. W.** Nature conservation in Poland. Rep. Dep. Nature Conserv. Cape Town No. 17 1960 (1961): 23-29.
- Ranzi, S.** Sulle affinità chimiche tra i diversi gruppi animali. R. C. Ist. Lombardo 94B 2 1960: 297-298.
- Rapoport, E. H.** Algunos aspectos de la biología de suelos. Bahía Blanca. (Universidad Nacional del Sur—Extension Cultural) 1959: pp. 23, 7 figs.
- Raven, C. P.** Informatie—overdracht door de eicel. Vakbl. Biol. 41 7: 125-136 2 figs.
- Raven, C. P.** see Bezem, J. J.
- Rawson, D. S.** A limnological comparison of twelve large lakes in northern Saskatchewan. Limnol. Oceanogr. 5 1960: 195-211.
- Rawson, D. S. & Fry, F. E. J.** Richard Birnie Miller 1915-1959. J. Wildl. Mgmt. 24 1960: 108.
- Raymont, J. E. G. & Conover, R. J.** Further investigation on the carbohydrate content of marine zooplankton. Limnol. Oceanogr. 6: 154-164.
- Read, C. P.** see Chandler, A. C.
- Reichenbach-Klinke, H.** Prof. Dr. C. R. Boettger. Beit. Naturk. Niedersachs. 13 1960: 3-17 portr.
- Reicher, M.** Edward Loth—se vie, ses oeuvres (3.viii. 1888—15.ix.1944). Folia morph., Warszawa 20: 219-233 1 fig.
- Reineck, H.-E.** Versteinerte Nordsee. Natur u. Volk 91: 151-162, 10 figs.
- Reish, D. J. (1).** The use of the sediment bottle collector for monitoring polluted marine waters. Calif. Fish Game 47: 261-272 3 figs.
- Reish, D. J. (2).** A study of benthic fauna in a recently constructed boat harbor in southern California. Ecology 42: 84-91 3 figs.
- Remane, A.** Gedanken zum Probleme: Homologie und Analogie, Praeadaptation und Parallelität. Zool. Anz. 166: 447-465.
- Rensch, B.** Phylogenetic increase of body-size and its correlative consequences. Bull. nat. Inst. Sci. India No. 7 1955: 157-158.
- Rey, L. & others.** Traité de lyophilisation. Paris (Hermann) 1960: pp. vii, 412 text illus.
- Richards, O. W. (1).** The problem of apparently non adaptive characters. Bull. nat. Inst. Sci. India No. 7 1955: 52-56.
- Richards, O. W. (2).** The fauna of an area of limestone pavement on the Burren, Co. Clare. Proc. R. Irish Acad. 62 B 1: 1-7 1 pl 1 fig.
- Riedel, W.** see Kamler, E.
- Riley, N. D.** International Commission on Zoological Nomenclature. Ent. Mon. Mag. (4) 20 1959: 288.
- Ripley, S. D.** A volume of collected papers of Sir Andrew Smith. Ostrich, Suppl. No. 3 1959: 303-305.
- Rivalier, E.** Voeux pour la mise en ordre de la nomenclature intraspécifique. Entomologiste 13 1957: 3-5.
- Robinson, G. A.** see Colebrook, J. M.
- Robinson, M. W.** Fictitious beasts. A bibliography, &c. London (Library Association): pp. 76, text illust.
- Robinson, T. S.** see Adams, H. D.
- Rolshoven, E.** Über eine neuartige Pinzette für schonende anatomische und chirurgische Präparationen. Anat. Anz. 109: 217-220 5 figs.
- Romanini, M. G. M.** Considerazioni sulla presenza di lipidi nella cellula ghiandolare gastrica dei vertebrati. Boll. Zool. 26 (2) 1959: 291-296.
- Romanova, N. N.** Benthos distribution in central and southern Caspian. Zool. Zh. 39 (6) 1960: 811-825 7 figs.
- Romein, B. J.** Maastrichts of Maastrichtien? Natuurk. Maandbl. 49 1960: 140-144 9 figs.
- Rosenthal, D. L.** D. N. Nassonov's gradual theory of excitation. in Rosenthal, D. L. & others (Problems of cytology and protistology: a collection of articles) Moskva & Leningrad (Izdatelstvo Akademii Nauk SSSR) 1960: 5-15 6 figs.
- Rottengatter, G.** see Auerbach, M.
- Rousseau, M. & Dajoz, R.** Espoirs pour la protection de la nature en France. Nature, Paris No. 3315: 284-296 9 figs.
- Roy, R.** see Lamotte, M.
- Rukhlyadev, Y. P.** Specific weight of zooplankton in the total flow of the Volga upon the intact hydrological regime. Zool. Zh. 40 (4): 490-497 2 figs.
- Russell, E. S.** Modes of diversity in animals. Bull. nat. Inst. Sci. India No. 7 1955: 46-51 1 fig.
- Russev, B.** Hydrobiologische Untersuchungen an einigen Bächen des Vitoša-Gebirges. Izv. zool. Inst. bulg. Akad. Nauk 10: 211-265 5 figs.
- Ruszkowski, J. & A.** The proposed general principles of establishing the Polish names of animals. Przegl. zool. 6: 99-101.
- Ruud, J. T.** Alf Nicolai Dannevig, 1886-1960. J. Cons. Int. Explor. Mer 26: 241-242 1 fig.
- Ryther, J. H.** see Menzel, D. W.
- Rzaska, J.** Observations on tropical rainpools and general remarks on temporary waters. Hydrobiologia 17: 265-286 3 figs.

- Sailer, R. I. Utilitarian aspects of supergeneric names. *Syst. Zool.* **10** : 154-156.
- Sakagami, S. F. An ecological perspective of Marcus Island, with special reference to land animals. *Pacif. Sci.* **15** : 82-104 18 figs.
- Sali, M. Umberto Pierantoni 1876-1959. *Boll. Zool.* **27** 1960 : 21-33 1 fig.
- Sarbadhikari, P. C. Chromosome alteration as a means of evolution. *Bull. nat. Inst. Sci. India No. 7* 1955 : 213-215.
- Sasaki, S. *see* Kurohagi, T.
- Scarlato, O. A. *see* Gurjanova, E. F.
- Schachter, D. Données nouvelles sur l'évolution de quelques étangs du delta du Rhône. *Rapp. Comm. int. Mer. Médit.* **15** 1960 : 155-162.
- Scheele, W. E. The natural history of Cleveland. *Mus. News.* **39** 6 1961 : 30-35 7 figs.
- Schlieper, C. Genotypische und phänotypische Temperatur- und Salzgehaltsadaptationen bei marinen Bodenvertebraten der Nord und Ostsee. *Kieler Meeresforsch.* **16** (2) 1960 : 180-185.
- Schmalhausen, I. I. The integration of biological systems and their regulation. *Byull. Mosk. Obshch. Isp. Prir. Otd. Biol.* **66** 2 : 104-134. [English summary.]
- Schreiber, G. Ricerche di citologia quantitativa. *Z. mikr.-anat. Forsch.* **66** 1960 : 301-328.
- Schwarz, S. Schichtung des Zooplanktons im Küsten- und Boddengebiet Rügens. *Z. Fisch.* **10** : 361-374 9 figs.
- Schweigger, E. Fenómenos hidrágraficos y biológicos en el Sud del Perú y en Norte de Chile. *Rev. Biol. mar. Valparaíso* **10** 1-3 1960 : 61-61 9 maps.
- Scott, H. (1). Warburton, C. 1854-1958 (Obituary). *Ent. Mon. Mag.* (4) **20** 1959 : 16 1 pl.
- Scott, H. (2). Rachel Margaret Davenport, F.R.E.S., 1895-1958 Obituary. *Ent. Mon. Mag.* (4) **20** 1959 : 15.
- Scott, P. BBC/IUCN Darwin Centenary Expedition to the British Virgin Islands, Trinidad, Panama, Ecuador and the Galapagos Islands, January to March 1959. *Rep. Wildfowl Tr. No. 11* 1958-1959 (1960): 61-76.
- Sebestyén, O. (1). Über Bestände, mit Berücksichtigung des See-planktons (auf Grund von Balaton-Studien). *Ann. Inst. biol. (Tihany) Hung. Acad. Sci.* **27** 1960 : 93-113.
- Sebestyén, O. (2). Horizontale Planktonuntersuchungen im Balaton. I. Orientierende Untersuchungen über die horizontale Verbreitung der Planktonkrebse. *Ann. Inst. biol. (Tihany) Hung. Acad. Sci.* **27** 1960 : 115-130 2 figs. [German summary.]
- Seel, O. Der Physiologus. Übertragen und erläutert von Otto Seel. Zürich & Stuttgart (Lebende Antike: Artemis Verlag) 1960: pp. 103.
- Seidel, F. Bemerkungen zu den Methoden der Evolutionsforschung. *Zool. Anz.* **166** : 465-470.
- Seliger, H. H. Fastie, W. G. & McElroy, W. D. Bioluminescence in Chesapeake Bay. *Science, N.Y.* **133** : 699-700 3 figs.
- Sembrat, K. Jan Prüfer (5th March, 1890-30th December, 1960). *Zool. Polon.* **10** 1959-1960 (1961): 185-187, 1 fig.
- Seniów, A. A new apparatus for paper electrophoresis. *Przegl. zool.* **4** 1960 : 194-198 3 figs.
- Seno, T. The origin and evolution of the sternum. *Anat. Anz.* **110** : 97-101.
- Sergeev, L. V. *see* Bukhman, M. P.
- Serra, J. A. (1). On the types of gene action in relation to a standard. *Rev. portug. Zool. Biol. ger.* **2** (1) 1959 : 105-115.
- Serra, J. A. (2). Compound-helix and monomer structure of chromosomes. *Rev. portug. Zool. Biol. ger.* **2** (1) 1959 : 51-96, 5 pls.
- Serra, J. A. (3). On the nature of overdominance and overdominant alleles. *Rev. portug. Zool. Biol. ger.* **2** (1) 1959 : 9-36.
- Serra, J. A. (4). Explanations of position effect and the hypothesis of the "chromosome hierarchy of fields". *Rev. portug. Zool. Biol. ger.* **2** (3-4) 1960 : 153-172.
- Serra, J. A. & Vicente, M. J. A useful modification of Weigert's iron hematoxylin method of coloration. *Rev. portug. Zool. Biol. ger.* **2** (3-4) 1960 : 219-220.
- Servit, Z. doc. Dr. Bedřich Eckert. *Vestn. českosl. zool. spolec.* **25** : 271-272, 1 fig.
- Setlow, R. B. and J. K. Soviet cellular biophysics. *Quart. Rev. Biol.* **36** 1 : 1-49.
- Shekulina, V. Y. On the stratigraphy of Vize-Namure and mid Carboniferous deposits of Northern Kirgizia. *Izv. Akad. Nauk Kirgiz.S.S.R. Nat. Techn.* **3** 4 : 5-13. [In Russian.]
- Shkorbatov, G. L. Intraspecific physiological variability in aquatic poikilothermal animals. *Zool. Zh.* **40** (10) : 1437-1452.
- Shulov, A. The biblical zoo in Jerusalem. *New Scientist.* **12** : 431-433, 6 figs.
- Shurin, A. T. Characteristic features of the bottom fauna in the eastern Baltic in 1959. *Ann. Biol., Copenhagen* **16** 1959 (1961) : 86-88 1 fig.
- Shvartz, S. S. On the works of Mammals Institute of Polish Academy of Science. *Zool. Zh.* **40** (7) : 1121-1124 3 figs.
- Siewing, R. Zum Problem der Polyphyly der Arthropoda. *Z. wiss. Zool.* **164** 1960 : 238-270 8 figs.
- Simonetta, A. Spedizione biologica in Somalia dell'Università di Firenze estate 1959. *Risultati zoologici 1° Contributo: parte narrativa. Monit. zool. ital.* **68** 1960 : 1-6.
- Simpson, G. G. Some problems of vertebrate paleontology. *Science, N.Y.* **133** : 1679-1689, 7 figs.
- Sinex, F. M. Biochemistry of ageing. *Science, N.Y.* **134** : 1402-1405.
- Sirlin, J. L. The nucleus of the cell nucleus. *Endavour* **20** : 146-153 4 figs.
- Sivertsen, E. Johan Ernst Gunnerus som zoolog. *K. norske Vidensk. Selsk. Forh.* **33** : 41-56 9 figs.
- Sjögren, B. De sista au sin art. Vilda djur som hotas av utrotning. Stockholm (Albert Bonniers Förlag) 1960 : pp. 160, 12 pls.
- Skalonge, V. N. The tasks of hunting management to the XXII Congress of the Communist Party of the Soviet Union. *Zool. Zh.* **40** (9) : 1291-1298.
- Slaby, O. On some processes that run by means of the secondary recapitulation. *Zool. Zh.* **40** (12) : 1770-1777, 2 figs.

sternum.

relation
(1) 1959:monomer
l. Biol.nce and
er. 2 (1)ect and
fields".ication.
oration.

220.

Seskoal.

physics.

Vize-
northern
Techn.

varia-

Zh. 40

New

bottom
Biol.,ute of
-1124der
figs.dell'
fici 1°
68

leone-

N.Y.,

cleus.

olog.

som

niers

nt to
the

as of

(12):

Sládeček, V. & Sládečková, A. Survey of Czechoslovakian hydrobiological activity in the year 1957. Abstracts of selected papers dealing with hydrobiology and relative scientific branches. *Sborn. Vys. Škol. Chem.-Tech. Praha* 4 2 1960: 455-498.

Sládečková, A. see **Sládeček, V.**

Smetana, R. & Paluska, E. What constitutes 'apparate reticulare interno' of Golgi in the goblet cells of vertebrate intestine? *Experientia* 17: 228-229. 5 figs.

Smirnov, N. N. Food cycles in sphagnum bogs. *Hydrobiologia* 17: 175-182 1 fig.

Smith, D. S. Reticular organizations within the striated muscle cell. An historical survey of light microscopical studies. *J. biophys. biochem. Cytol.* 10 4 part 2: 61-87, 49 figs. [Not seen.]

Sneath, P. H. A. Recent developments in theoretical and quantitative taxonomy. *Syst. Zool.* 10: 118-139 5 figs.

Snodgrass, R. E. Animal societies, from slime mould to man. *Rep. Smithsonian. Instn.* 1960 1961: 425-445.

Snyder, D. P. see **Dodge, W. E.**

Sokal, R. R. Distance as a measure of taxonomic similarity. *Syst. Zool.* 10: 70-79 2 figs.

Sokolova, M. N. (1). The distribution of the groupings (biocenoses) of the bottom fauna of the deep-sea trenches in North-Western Pacific. *Trud. Inst. Okeanol.* 34 1960: 21-59 3 figs.

Sokolova, M. N. (2). Some peculiarities of the distribution of the bottom biocenoses of the bed-floor of the north western Pacific. *Trud. Inst. Okeanol.* 34 1960: 336-342.

Sontag, L. W. Fetal adaptation. *Bull. nat. Inst. Sci. India* No. 7 1955: 85-90.

Soran, V. Use of the phase contrast microscope in biological research. *Natura, București. Biol.* 13: 26-34 2 figs. [English summary.]

Sorokin, J. I. Self-absorption of C^{14} radiation during counts on dried invertebrates. *Trud. Inst. Biol. Vodochr. No. 3(b)* 1960: 103-105. [In Russian.]

Spirito, A. Profili di biologi. *Tedoro Perri* (1910-1960. *Riv. Biol.* 54: 90-106, ports.

Spurway, H. Shadow elimination and the origin of flight. *Bull. nat. Inst. Sci. India* No. 7 1955: 110-111.

Stanek, I. Zur Morphologie der Oberflächen Tätigkeit der Zelle mit besonderer Rücksicht auf den Resorption-sprozess. *Biol. Práce, Bratislava* 7 8: 3-159 figs.

Stanković, S. The Balkan Lake Ohrid and its living world. *Monogr. biol.* 9 1960: pp. 357, 1 pl. 100 figs.

St. Croix, O. H. de. Some notes on sanctuaries and wild life in South India (1959). *J. Bombay nat. Hist. Soc.* 57: 618-634.

St. John, P. A. A volumetric study of zooplankton distribution in the Cape Hatteras area. *Limnol. Oceanogr.* 3 1958: 387-397 11 figs.

Stock, J. H. & Vos, A. P. C. de. Einige wirbellose Tiergruppen des Dollart-Ems-Estuarium. *Bijdr. Dierk.* 30 1960: 63-80 5 figs.

Stoffers, A. L. see **Geelen, J. F. M.**

Stoll, N. R., Dollfus, R. Ph. & others. International code of zoological nomenclature adopted by the XV International Congress of Zoology. London (International Trust for Zoological Nomenclature): pp. xviii, 176.

Strickland, J. D. H. & Parsons, T. R. A manual of sea water analysis. *Fish. Res. Board Canada Bull.* 125 1960 pp. 185.

Strinati, P. see **Coiffart, H.**

Sud, B. N. The "Chromatoid body" in spermatogenesis. *Quart. J. micr. Sci.* 102: 273-292.

Suzumov, E. M. (Investigations of the Pacific). *Vestn. Akad. Nauk. SSSR* 3: 67-77 Pl. [In Russian.]

Swennen, C. see **Hennipman, E.**

Szechowycz, R. Multipurpose development schemes and wild life communities. *Loris* 9: 50-53.

Szidat, L. La parasitología como Ciencia auxiliar para develar problemas hidrobiológicos, zoogeográficos y geofísicos del Atlántico Sud. in *Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960.* Mexico, D. F. (Instituto Politécnico Nacional) 1960: 577-594.

Taber, R. D. Wildlife administration and harvest in Poland. *J. Wildl. Mgmt.* 25: 353-363.

Tamura, T. see **Amemiya, I.**

Tanaka, O., Irie, H., Izuka, S. and Koga, F. The fundamental investigation on the biological productivity in the North-west of Kyushu. I. The investigation on plankton. *Rec. oceanogr. Wks. Japan Spec. No. 5*: 1-57 10 figs.

Tanner, V. M. Carl Linnaeus' contributions and collections. *Gr. Basin Nat.* 19 1959: 27-35 1 fig.

Tarasov, N. I. (1). [Luminescence of the sea.] *Moakva (Izdatel'stvo Akademii Nauk S.S.S.R.)* 1956: pp. 204.

Tarasov, N. I. (2). On marine fouling. *Zool. Zh.* 40 (4): 477-489 5 figs.

Tarjan, A. C. see **Jutras, P. J.**

Tavolga, W. N. see **Lanyon, W. E.**

Taylor, E. W. Nature conservation in Yorkshire. *Naturalist* No. 879: 173-175.

Tercats, R. R. Une grande multiplicité de biotopes dans un espace restreint: la grotte de la belle roche (Comblain-au-Pont). *Bull. Com. Topogr. Topon. F.S.B.* 23 1969: 10-14 fig.

Tennissen, D. see **Geelen, J. F. M.**

Thompson, W. R. Evolutionary theory and the morphological concept of adaptation. *Bull. nat. Inst. Sci. India* No. 7 1955: 35-45.

Tilden, J. W. Certain comments on the subspecies problem. *Syst. Zool.* 10: 17-23.

Timm, T. Discoveries records of some water-invertebrates and fishes in 1955-1957. *Faunist. Märkm.* 1 (1) 1959: 69-71.

Timofeeva-Resovskaya, E. A. see **Timofeev-Resovskii, N. V.**

Timofeev-Resovskii, N. V., Timofeeva-Resovskaya, E. A., Milyutina, G. A. & Getsova, A. B. Coefficients of accumulation of radioactive isotopes of 16 different elements by freshwater organisms and the effect of ETA on some of them. *Dokl. Akad. Nauk SSSR (Transl.) Biol. Sci.* 132 1960: 369-372 2 figs.

Tisdale, E. W. Ecologic changes in the Palouse. *Northw. Sci.* 35 4: 134-138.

Tjumenzev, N. V. see **Kozhov, M. M.**

Torechio, M. Riodinamento del Museo 'E. Caffi' di Bergamo. *Natura, Milano* 52: 65-67 2 figs.

- Torsukov, S. N.** Contribution to the procedure of working out benthal hydrobiological samples. *Zool. Zh.* 40 (2) : 275-276 1 fig.
- Tortonese, E.** Nuovo contributo alla conoscenza del benthos della scogliera ligure. *Arch. Oceanogr. Limnol., Roma* 12 2 : 163-183 2 pls. 4 figs. [English summary.]
- Toschi, A.** Etablissement des réserves pour la protection de la fauna et de la flore en Italie. *Terre et la Vie* 1959 Suppl. 1959 : 58-63.
- Towarnicki, R.** Evolutionism and Darwinism of Józef Nuszbaum. *Przegl. zool.* 5 (2) : 83-96 1 portr.
- Troshin, A. S.** Sorption theory of substance distribution between cell and environment. in Rosental, D. L. & others (Problems of cytology and protistology: a collection of articles). Moskva & Leningrad (Izdatelstvo Akademii Nauk SSSR) 1960 : 16-28 7 figs.
- Tsikhon-Lukanina, E. A.** see Lukanin, V. S.
- Tulkki, P.** Studies on the bottom fauna of the Finnish southwestern archipelago. I. Bottom fauna of the Airisto sound. *Ann. Soc. zool.-bot. fenn. Vanamo* 21 (3) 1960 : 1-26, 18 figs.
- Tulp, A. S.** see Hennipman, E.
- Turner, E. R. A.** Survival values of different methods of camouflage as shown in a model population. *Proc. zool. Soc. Lond.* 136 273-284 4 figs. 1 pl.
- Urbanowicz, K.** Recollections on Tadeusz Wolski. *Przegl. zool.* 4 1960 : 245-248 1 pl.
- Uschakov, P. V.** see Gurjanova, E. F.
- Vaas, K. F. (1).** Hydrobiological observations in the Biesbosch. *Arch. néerl. Zool.* 13 1960 : 619-623.
- Vaas, K. F. (2).** De taak en het arbeidsveld van de Afdeling Delta—Onderzoek van het Hydrobiologisch Instituut te Yerseke. *Vakbl. Biol.* 41 6-13.
- Vacelet, J.** see Laborel, J.
- Vader, W. J. M.** see Hennipman, E.
- Vaga, A.** Das Leben und die Tätigkeit von C. Linné. *Loodusuur. Seltsi, Aast. Tallinn* 53 : 7-22 2 pls. 2 figs.
- Valverde, J. A.** La protection de la fauna en Espagne, Les problèmes. *Terre et la Vie* 1959 1959 : 31-41.
- Vandel, A.** L'origine des vertébrés. *Année biol.* (3) 37 1-2 : 5-41 5 figs.
- Van Ganssen, P.** Adaptations structurelles des animaux filtrants. *Ann. Soc. zool. Belg.* 90 1959-60 (1960) : 161-231 32 figs.
- Vannucci, M.** A Nova Sistemática e a Planctonologia. *Bol. Inst. Ocean. S. Paulo* 8 1957 : 217-223.
- Varley, G. C. & Gradwell, G. R.** Key factors in population studies. *J. anim. Ecol.* 29 1960 : 399-401 1 fig.
- Veratti, E.** Investigations on the fine structure of striated muscle fibre. *J. biophys. biochem. Cytol.* 10 4 part 2 : 1-59 4 pls. (not seen).
- Verheyen, R.** Louis Debot (1898-1961). Notice biographique. *Bull. Inst. Sci. nat. Belg.* 37 1 : 1-5 portr.
- Vibert, R. & Lagler, K. F.** Pêches continentales : biologie et aménagement. Paris (Dunod) xxiv, 720 text. illus.
- Vicente, M. J.** Improvements in the glycerine-gelatine mounting procedure for microscopical preparations. *Rev. portug. Zool. Biol. ger.* 2 (3-4) 1960 : 221-222.
- Vicente, M. J.** see Serra, J. A.
- Vinogradov, C. A. (1).** Les travaux de L'Institut d'Hydrobiologie de L'Académie des Sciences de R.S.S. Ukrainienne, effectués dans le cours inférieur des fleuves tributaires de la Mer Noire et dans la région nord-ouest de cette mer. *Lucrar. Stat. zool. mar., (Aginea)* (Vol. festiv) 1959 : LVII-LXVI.
- Vinogradov, C. A. (2).** Les travaux de L'Université "I. I. Metchnikov" d'Odessa dans la région Nord-Ouest de la Mer Noire et dans les limans du littoral nordique de cette mer (1917-1950). *Lucrar. Stat. zool. mar. Aginea* (Vol. Festiv) 1959 : XLI-LV.
- Vinogradov, M. E.** see Bogorov, V. G.
- Virvellyr, A.** Norske dyrenavn med tilhørende latinske navn. *Fauna, Oslo* (14) (1) Bilag 1960 (1961) : 1-57.
- Volikova, A. A. & Chernova, I. A.** To the stratigraphy of the upper Silurian and Devonian deposits of the northern spurs of Kok-Shaai ridge. *Izv. Akad., Nauk Kirgiz, S.S.R. Nat. Tech.* 34 : 37-48. [In Russian.]
- Voorthuysen, J. H. van.** Ökologische Schlussfolgerungen. *Bijdr. Dierk.* 30 1960 : 139-144.
- Vos, A. P. C. de** see Stock, J. H.
- Vučetić, T.** Some new data on the zooplankton standing crop measurements in the Adriatic. *Notes Inst. oceanogr. Split* No. 16 : (1-7) 2 figs.
- Vuren, J. P. J. van.** Nature conservation on farms. *Afr. Wild Life* 15 : 231-239 8 figs.
- Waddington, C. H.** Experiments on canalizing selection. *Genet. Res.* 1 1960 : 140-150.
- Waldichuk, M.** Effects of pulp and paper mill wastes on the marine environment. *Trans. 2nd Seminar biol. Probl. Water Pollut., U.S. Publ. Hlth. Serv., 1959* (1960) : (pp. 17) and *Stud. Fish. Res. Bd. Can.* No. 627 1960.
- Walker, B. W.** The ecology of the Salton Sea, California, in relation to the sportfishery. *Fish Bull. Calif.* No. 113 : pp. 204 80 figs.
- Waters, T. F. & Knapp, R. J.** An improved stream bottom fauna sampler. *Trans. Amer. Fish. Soc.* 90 : 225-226 1 fig.
- Watson, A. J.** The place of reinforcement in the explanation of behaviour. in Thorpe, W. H. & Zangwill, O. L., Current problems in animal behaviour. London (Cambridge University Press) : 273-301.
- Watson, D. G., Davis, J. J. & Hanson, W. C.** Zinc-65 in marine organisms along the Oregon and Washington coasts. *Science, N.Y.* 133 : 1826-1828 1 fig.
- Wegelin, R.** Die Grundwasser- und Brunnenfauna. *Wiss. Z. K.-Marx Univ. Leipzig. Math.-Nat. R.* 10 1 : 121-126 2 figs.
- Wegner, R. N.** Ross Granville Harrison (Germantown Pennsylvania 13.1.1870-30.9.1959 Philadelphia). *Anat. Anz.* 109 : 458-465 1 fig.
- Weidmann, U.** see Peacock, A. D.
- Wetzel, A.** Einführung in die Nutzwasserbiologie. *Wiss. Z. K.-Marx-Universität Leipzig Math.-Nat. R.* 10 1 : 75-80.
- Whitley, G. P.** The life and work of Gerard Krefft. *Proc. R. zool. Soc. N.S.W.* 1958-1959 (1961) : 21-34 1 fig.
- Whitley, G. P. & Pope, K.** Bibliography of Anthony Musgrave. *Proc. R. zool. Soc. N.S.W.* 1958-59 (1961) : 12-20.

Whitley, G. P. *see* McMichael, D. F.

Wiborg, K. F. Some remarks on the distribution of zooplankton, fish eggs and larvae in the Norwegian Sea in 1958. *Rapp. Cons. Explor. Mer* **149** : 175.

Wickler, W. Ökologie und Stammesgeschichte von Verhaltensweisen. *Fortschr. Zool.* **13** : 303-365.

Wickstead, J. H. A quantitative and qualitative study of some Indo-West-Pacific plankton. *Fish. Publ. Lond.* No. 16 : pp [iv], 200 5 pls. 1 map, text illust.

Wieser, W. & Kanwisher, J. Vorschlag zum Anlegen einer „Stoffwechselkartei“ für marine Tiergemeinschaften. *Zool. Anz.* **165** 1960 : 370-375 2 figs.

Wigley, R. L. Benthic fauna of Georges Bank. *Trans. N. Amer. Wildl. Conf.* No. 26 : 310-317 3 figs.

Wilde, W. J. J. O. de *see* Hennipman, E.

Wisely, B. & Purday, C. On algal mass-culture unit for feeding marine invertebrate larvae. *Tech. Pap. Div. Fish. Oceanogr. C.S.I.R.O.* No. 12 1-12 1 pl.

Wright, J. C. The limnology of Canyon Ferry Reservoir. I. Phytoplankton-zooplankton relationships in the euphotic September-October, 1956. *Limnol. Oceanogr.* **3** 1958 : 150-159 4 figs.

Wundsch, H. H. Leo Minder. 1887-1961. *Z. Fisch.* **10** : 389-390 1 fig.

Yablokov, A. V. On macrophotography of zoological objects by means of an enlarger. *Zool. Zh.* **39** (6) 1960 : 933-934 2 figs.

Yamazi, T. (1). Automatic plankton sampler with multiple nets. *Publ. Seto mar. biol. Lab.* **8** 2 1960 : 451-453 1 pl.

Yamazi, I. (2). New device of automatic plankton sampler with multiple nets and its experimental results. *I. Zool. Mag. Tokyo* **70** : 180-187 6 figs.

Yapp, W. B. An introduction to animal physiology. Second edition. Oxford University Press 1960 : pp. xix, 423 frontis. 3 pls. text figs.

Young, J. Z. Eyes, colours and shapes. *Proc. roy. Instn. Gr. Brit.* **38** : 401-413 2 pls.

Zambrano, A. Carlos Darwin y la teoria de la evolución. *Bol. Inf. Cient. nac. Quito* **10** 89 1959 : 24-41.

Zavattari, E. Biogeografia della Isole Pelagia Fauna. *R.C. Accad. Naz. xl* (4) 11 1960 : 263-281 1 fig.; 437-463 6 pls. 3 maps.

Zeitzev, Yu. P. Surface pelagic biocoenose of the Black Sea. *Zool. Zh.* **40** (6) 818-825 5 figs.

Zelinka, M. The development of biological conditions in a reservoir near Vir during the first years after filling. *Sborn. Vys. Skol. Chem.-Tech. Praha* **4** 1 1960 : 429-476 12 figs. [English summary.]

Zeuner, F. E. Time rates of organic evolution. *Bull. nat. Inst. Sci. India* No. 7 1955 : 276-289 9 figs.

Zhirumsky, A. V. & Pisareva, L. N. Thermostability of the tissues of some sea animals living at various depths. *in* Rosental, D. L. & others (Problems of cytology and protozoology : a collection of articles) Moskva & Leningrad (Izdatelstvo Akademii Nauk SSSR) 1960 : 112-116.

Ziegelmeier, E. (1). Investigations of the bottom fauna in the eastern part of the German Bight, 1959. *Ann. Biol., Copenhagen* **16** 1959 (1961) : 80-82 2 figs.

Ziegelmeier, E. (2). Investigations on the bottom fauna in the shelf region off S.W. Iceland and S.E. Greenland during the research cruises with "Anton Dohrn" in the ÖGY. *Rapp. Cons. Explor. Mer* **149** : 209.

Zimmermann, P. Experimentelle Untersuchungen über die ökologische Wirkung der Strömungsgeschwindigkeit auf die Lebensgemeinschaften des fließenden Wassers. *Schweiz. Z. Hydrol.* **23** 1 : 1-81, 22 figs. [English summary.]

II.—SUBJECT INDEX

GENERAL LITERATURE

General Works.—Textbooks.—Blandino, G.; Greenberg, M. J.; Brown, F. A., jr.; Buchsbaum, R. & Milne, L. J.; Chandler, A. C. & Read, C. P.; Drischel, H.; Schmalhausen, I. I.; Remane, A.; Popovici-Băznoagă, A.; Krumbiegel, I.; Nakazawa, S.; Vandel, A.; Noble, E. R. & G. A.

History.—Arauz, P. J.; Bergh, H. K. van den; Brewer, R.; Castellanos, A.; Edinger, T.; Fedorowicz, Z.; Tanner, V. M.; Silvertsen, E.; Seel, O.; Romein, B. J.; Haartman, L. v.; John, H. J.; Jurgenson, P. B.; Kappeler, M. A.; Leclercq, J.; Lehmann, H.; Lukaszewicz, K.; McKie, D.; Needham, J. & Leslie, D.; Orlikowska, C.; Ortel, J.; Towarnicki, R.; Vaga, A.; Zambrano, A.

Biography.—Anon. (3); Colosi, G. (2); Dathe, H. (1); Reichenbach-Klinke, H.; Günther, K.; Whitley, G. P.; Heptner, V. G.

Obituary.—A. S.; Albrecht, M. L.; Altmann, G.; Anon. (5); Anon. (8); Bammel, A. C. V. van; Candeaș, A.; Conci, C.; Da Gama, M. M.; Eggleston, F. E.; Fischer, F. C. J.; Frisch, K. V.; Godlewski, H.; Spirito, A.; Servit, Z.; Sembrat, K.; Scott, H. (1); Scott, H. (2); Salá, M.; Rudd, J. T.; Reicher, M.; Rawson, D. S. & Fry, F. E. J.; R. C.; H. G. C.; Halme, E.; Hohorst, W.; Jirovec, O.; Lang, J.; Lieftinck, M. A.; Lenz, F.; Lindzey, J. S.; Lozano Cabo, F.; Longfield, C.; Urbanowicz, K.; Verheyen, R.; Wundsch, H. H.; Wegner, R. N.

Bibliography.—Adams, H. D. & Robinson, T. S.; Anon. (10); Boev, S. N.; Galouzo, I. G. & Gvozdev, E. V.; Dathe, H. (2); Sládeček, V. & Sládečková, A.; Robinson, M. W.; Ripley, S. D.; Whitley, G. P. & Pope, K.; McMichael, D. F. & Whitley, G. P.

Taxonomy.—Bigelow, R. S.; Blackwelder, R. E.; Brown, W. L.; Dobzhansky, T. (1); Gnanamuthu, C. P.; Sokal, R. R.; Sneath, P. H. A.; Moreau, R. E.

Nomenclature.—Bachmaier, F.; Balfour-Browne, F.; Burke, P. J.; Collin, J. E.; Costa Lima, A. de; Dvořák, J.; Stoll, N. R. & Dollfus, R. Ph.; Sailer, R. I.; Rivalier, E.; Riley, N. D.; Peters, J. A.; Hemming, F. (1); Hemming, F. (2); Hemming, F. (3); Landin, B.-O.; Opinion 592; Virveldy, A.

Vernacular.—Ruszkowski, J. & A.; Lindgren, E.; Martin del Campo, M. en C. R.

Museums.—Anon. (2); Bernink, W.; Boertel, W. van; Brisson, C.; Engel, H.; Scheele, W. E.; Jonge, J. de; Kremer-Dijkzen, I. M. G.; Kruyter, E. M. (1); Kruyter, E. M. (2); Mabbatt, F. S. III; Olascher, J.; Parr, A. E.; Torchio, M.

Collections.—Troshin, A. S.

Institutions and Societies.—Anon. (9); Anon. (6); Anon. (11); Bucher, O.; Dannel, R.; Duncan, T. O.; Friedrich-Frekza, H.; Shvartz, S. S.; Kuiper, K.; Krysiak

K.; Maubeuge, P. L.; Vinogradov, C. A. (1); Vinogradov, C. A. (2); Vaas, K. F. (2); Marks, E. N.; Bankowski, Z.; Conklin, E. G.; Pieper, W.

Congresses and Conferences.—Skalonge, V. N.; Pavlovsky, E. N.; Zasinski, W.

Methods.—d'Aguilar, J., Benard, R. & Bessard, A.; Åkesson, B. (1); Åkesson, B. (2); Bielańska-Osnochowska, Z.; Bezem, J. J. & Raven, P.; Bielawski, J.; David, G. B.; Mallion, K. B. & Brown, A. W.; Davis, J. L.; Demaux, J.; Desob, K.; Flora, C. J.; Fujii, S.; Serra, J. A. & Vicente, M. J.; Seidel, F.; Peters, W.; Kamler, E. & Riedel, W.; Klein, B. M.; Lauf, G. H.; Cummins, K. W.; Eriksen, C. H. & Parker, M.; Ostroumov, A. G.; Patten, B. C.

Technique.—Anderson, R. O.; Auerbach, S. I. & Crossley, D. A., jr.; Barthelmes, D. (1); Bauer, B. L.; Bodrova, N. V. & Krajkhin, B. V.; Bukhman, M. P.; Polina, R. I. & Sergeev, L. V.; Bukhman, M. P. & Raikov, I. B.; Chew, R. M. & Dammann, A. E.; David, G. B. & Brown, A. W.; Dodge, W. E. & Snyder, D. P.; Fraser, J. H. (3); Gradwell, G. R.; Soran, V.; Seniów, A.; Rolshoven, E.; Rey, L. & others; Reish, D. J. (1); Grzycki, S. (1); Gurr, E. & MacConaill, M. A.; Iselin, R. A.; Job, S. V.; Jutras, P. J. & Tarjan, A. C.; Kagan, I. G.; Brown, R. H. J.; Kimata, M. & others; Laun, H. C.; Lukania, V. S.; Poddubnaja, T. L. & Tsikhon-Lukanina, E. A.; Lukania, V. S.; Malhotra, S. K.; McNeely, R. L. & Pereyra, W. T.; Mackay, R. D.; McErean, A. J. & Phillips, R. C.; Macfadyen, A. (1); MacConaill, M. A. & Gurr, E.; Montgomery, G. G.; Palkovits, M. & Csapo, S.; Ostrowski, K. & Komender, J.; Ostrowski, K. & Czekalinski, L.; Pértés, J. M. (3); Torsukov, S. N.; Vicente, M. J.; Yamazi, I. (1); Yamazi, I. (2); Yablokov, A. V.; Wisely, B. & Purday, C.; Waters, T. F. & Knapp, R. J.

Nature Preservation.—Anon. (7); Bonnin, J. & Julien, M. H.; Collins, W. B.; Curry-Lindahl, K. (2); Dementiev, G. P.; Dorst, J. (2); Eible-Eibesfeldt, I.; Ferens, B.; Gentill, J.; Griesel, J.; Taber, R. D.; Szechowycz, R.; St. Croix, O. H. de; Rousseau, M. & Dajoz, R.; Rand, R. W.; Petrides, G. A.; Heinsheimer, J.; Hillaby, J.; Hoffmann, L.; N. D. E.; Neves, C. M. B.; Panouse, J. B.; Payne, H. C.; Taylor, E. W.; Toschi, A.; Vuren, J. P. J. van; Valverde, J. A.

National Parks.—Anon. (4); Bruijns, M. F. M.

Zoological Gardens.—Fiennes, R. N. T. —W.—; Graham-Jones, O.; Shulov, A.; Petzold, H. G.; Jones, O. G.; Kotarba, I.; Landowski, J.

Marine Stations.—Anon. (1); Cáräus, S. I.

Theories.—Choisy, M.; Colosi, G. (1); Rosenthal, D. L.; Leslie, I.; Medawar, P. B.

Tissue Culture.—Frei, E.; Lasnitzki, I.

Biophysics.—Agnedal, P. O.; Akamsin, A. D.; Parchevski, V. P. & Polikarpov, G. G.; Casati, A.; Daniel, J. C. & Blain, R. L.; Gilyarova, V. N.; Sorokin, J. I.; Timofeev-Resovskii, N. V.; Timofeeva-Resovskaya, E. A.; Milyutina, G. A. & Getsova, A. B.; Nakai, Z. & Fukai, R. & others; Ichikawa, R.; Watson, D. G.; Davis, J. J. & Hanson, W. C.; Setlow, R. B. & J. K.

STRUCTURE (including HISTOLOGY and CYTOLOGY)

Skeleton.—Seno, T.

Epithelium.—Astbury, W. T. & Beighton, E.

Nervous system.—Adam, H.; Ramon, y Cajal, S.; Liven, A. N.

Blood system.—Muratori, G.

Muscles.—Clara, M.; Veratti, E.

Cytology.—Romanini, M. G. M.; Bolognari, A.; Sirlin, J. L.; Schreiber, G.; Grzycki, S. (2); Malhotra, S. K.; Claude, A.; Stanek, I.; Smith, D. S.; Smetana, R. & Paluska, E.; Hanson, J.

PHYSIOLOGY

General Works.—Burkhardt, D.; Carthy, J. D.; Yapp, W. B.

Nervous system.—Barlow, H. B.; Matveyev, B. S.; Bullock, T. H.; Krnjević, K.; Loewenstein, W. R.

Vision.—Benoit, J.; Young, J. Z.; Marriott, F. H. C.; Autrum, H.

Temperature.—Frecht, H.; Hoffmann, C.

Respiration.—Mattisson, A. G. M. (2).

Hormones.—Jutisz, M. & LaLlosa, P. de; Appaswamy Rao, M.; Gabe, M.

Ageing.—Sinex, F. M.

Muscles.—Braun, A. D.

Special problems.—Chen, P. S.; Shkorbatov, G. L.; Grundfest, H.; Kövér, A. & Kovács, T.; Monné, L.; Perlmutter, A.

Biochemistry.—Ranzi, S.; Euler, U. S. von; Mendes, E. G. & Knapp, E. P.; Mattison, A. G. M. (1).

DEVELOPMENT

Embryology.—Slaby, O.; Sontag, L.; Jura, C.

Sperm.—Nath, V.; Sud, B. N.

Egg.—Raven, C. P.

Reproduction.—Pozo Lora, R.

Growth.—Peabody, F. E.

Parthenogenesis.—Peacock, A. D. & Weidmann, U.; Nabel-Hoffstetter, M.

EVOLUTION and GENETICS

Evolution.—Bernal, J. D.; Chetverikov, S. S.; Danielli, J. F.; Page, L. (1); George, C. J.; Siewing, R.; Radovanović, M.; Haldane, J. B. S. (1); Hora, S. L.; Iablokoff-Khnzorian, S. M.; Ilyichev, V. D.; Kasyanenko, V. G.; Kusnezov, N.; Lack, D.; Manton, S. M.; Mookerjee, H. K.; Mookerjee, S.; Milojević, D. B.; Pantin, C. F. A.; Zeuner, F. E.

Heredity.—Benazzi, M.; Beale, G. H.; Morton, A. G.

Selection.—Mason, H. L. & Langenheim, J. H.; Waddington, C. H.; Haldane, J. B. S. (2); James, J. W.; Kimura, M.

Genetics.—Kiriakoff, S. G.; Kroeger, H.

Gene.—Parsons, P. A.; Gilbert, N.; Snodgrass, R. E.; Serra, J. A. (1); Serra, J. A. (3); Lerma, B. de.

Mutation.—Koller, P. C.

Animal husbandry.—Downs, J. F.

Species problem.—Ehrlich, P. R.; López, E. A.; Tilden, J. W.

Chromosome problem.—Serra, J. A. (4); Serra, J. A. (2); Sarbadhikari, P. C.

ECOLOGY and HABITS

General Works.—Klomp, H.; Kühnelt, W. (1); Monchadsky, A. S.; Wickler, W.

Behaviour.—Lanyon, W. E. & Tavolga, W. N.; Cane, V.; Cloudale-Thompson, J. L.; Deutsch, J. A.; Gray, J.; Broadbent, D. E.; Portmann, A.; Huheey, J. E.; Jensen, D. D.; Lorenz, K.; Marler, P.; Turner, E. R. A.; Watson, A. J.

Adaptation.—Dobzhansky, T. (2); Spurway, H.; Russell, E. S.; Richards, O. W. (1); Rensch, B.; Pettit, L.; Nassimovich, A. A.; Van Gansen, P.; Thompson, W. R.

Parasitism.—Sridat, L.

Winter sleep.—Kayser, Ch.

Soil fauna.—Rapoport, E. H.; Kitazawa, Y.; Kurasawa, H.; Nakamura, M. & Kondo, M.; Kühnelt, W. (2); Macfadyen, A. (2).

Dekeyser, P. L. & Derivot, J.

Desert and dune fauna.—Dekeyser, P. L. & Derivot, J.; Edney, E. B.

Cave fauna.—Berczik, A. (1); Coiffart, H. & Strinati, P. (1); Fage, L. (2); Tercats, R. R.

Steppe fauna.—Flint, V. E. & Golovkin, A. N.

Atoll fauna.—Fischer, P. H. (1); Fischer, P. H. (3).

Luminescence.—Clarke, G. L. & Hubbard, C. T.; Tarasov, N. I. (1); Seliger, H. H.; Fastie, W. G. & McElroy, W. D.; Harvey, E. N.; Nicol, J. A. C.

Population Study.—Andrewartha, H. G.; Davis, D. E.; Kaczmarek, W.; Kojima, K. I. & Kelleher, T. M.; Kojima, K.; Koppányi, T.; Mainx, F.; Margalef, R. (2); Andersen, F. S.; Varley, G. C. & Gradwell, G. R.

Special problems.—Boyd, J. M.; Tisdale, E. W.; Lamotte, M. S. & Roy, R.; Cragg, J. B.; Delamare Deboutville, C. & Paulian, R.

Freshwater ecology.—Vaas, K. F. (1); Timm, T.; Stanković, S.; Russev, B.; Rawson, D. S.; Macan, T. T.; Leentvaar, P. (2); Leentvaar, P. (1); Kurohagi, T. and Sasaki, S.; Kurohagi, T. (2); Kurohagi, T. (1); Karasowska, K. & Mikulski, J. S.; Heyligers, P. C.; Geelen, J. F. M.; Oomen, H. C. J.; Stoffers, A. L. & Teunissen, D.; Elster, H. J. & Jensen, K. W.; Bogachev, V. V.; Bernard, F. (2); Beeton, A. M.; Auerbach, M. & Rotten-gatter, G.; Abbott, W. & Hoese, H. D.

Freshwater special problems.—Zimmermann, P.; Zelinka, M.; Wetzel, A.; Wegelin, R.; Smirnov, N. N.; Róska, J.; Málacea, I.; Kovalsky, V. V. & Letunova, S. V.; Klapper, H.; Kahan, D.; Hynes, H. B. N.; Gianotti, F. S.; Geen, G. H. & Andrew, F. J.; Czapik, A.; Cordone, A. J. & Kelley, D. W.; Bonn, E. W. & Holbert, L. R.; Allanson, B. R. & Gieskes, J. M. T. M.; Popovská, P. (1).

Freshwater plankton.—Wright, J. C.; Sebestyén, O. (1); Sebestyén, O. (2); Rukhlyadev, Y. P.; Popescu, E.; Negro, K.; Mizuno, T.; Merlo, S.; Luterova (Lochan-ina), L. A.; Lillelund, K. (1); Kiselite, T. S.; El-Hawary, M. A.; Barthelmes, D. (2); Amemiya, I.; Tamura, T.; HanYu, I. & Itazawa, Y.

Freshwater Benthos.—Popovská, P. (2); Mordukhai Boltovskoi, F. D. & Poddubnaja, T. L.; Ljakhov, S. M.; Lindgren, P. E.; Janković, M.; Grímás, U.; Dunn, D. R.; Berczik, A. (2).

Marine ecology.—Wieser, W. & Kanwisher, J.; Voorthuysen, J. H. van; Stock, J. H. & Vos, A. P. C. de; Schachter, D.; Radovich, J.; Molinier, R.; Massuti, M.; Legand, M.; Kozov, M. M.; Guareschi, C.; Gillbricht, M.; Fontaine, M.; Bassindale, R.; Bernard, F. (1); Suzumov, E. M.; Strickland, J. D. H. & Parsons, T. R.; Pora, A. E.; Pérès, J. M. & Picard, J. (2); Nilsson, L. & Jägersten, G.;

Mordukhai-Boltovskoi, F. D. (2); Mordukhai-Boltovskoi, F. D. (1); Schwiigger, E.

Marine special problems.—Vibert, R. & Lagler, K. F.; Zhirmunsky, A. V. & Pisareva, L. N.; Walker, B. W.; Waldichuk, M.; Tarasov, N. I. (2); Margalef, R. (1); Mallet, L.; Laborel, J.; Pérès, J. M.; Picard, J. Vacelet, J.; Krey, J.; Koshov, M. M. & Tjumenzev, N. V.; Hoese, H. D.; Dolgopolskaya, M. A.; Bourcart, J.; Genesseeaux, M. & Klimek, E.; Banoub, M. W.

Marine plankton.—Zeitzev, Yu. P.; Wickstead, J. H.; Wiborg, K. F.; Vučetić, F.; Vannucci, M.; Tanaka, O.; Irie, H.; Isuka, S. & Koga, F.; St. John, P. A.; Schwarz, S.; Raymond, J. E. G. & Conover, R. J.; Pavstiks, E. A. & Grusov, L. N.; Nikolaev, I. I. & Krievs, N. K.; Menzel, D. W. & Ryther, J. H.; Maskowski, W.; McAllister, C. D.; Lindquist, A.; Lie, U.; Kusmorskaya, A. P. (1); Kusmorskaya, A. P. (2); Hallgrímsson, I.; Glover, R. S. & Barnes, B. I.; Fraser, J. H. (1); Fraser, J. H. (2); Einarsen, H. & Gürtürk, A.; Digby, P. S. B. (1); Digby, P. S. B. (2); Dimov, I. G.; David, P. M.; Corlett, J. (1); Corlett, J. (2); Colebrook, J. M. & Robinson, G. A.; Bogorov, V. G. & Vinogradov, M. E.; Bainbridge, V.; Anichini, C.; Acara, A. & Balbandoglu, Ü.

Marine Benthos.—Ziegelmeier, E. (2); Ziegelmeier, E. (1); Wigley, R. L.; Tulkki, P.; Tortonese, E.; Sokolova, M. N. (1); Sokolova, M. N. (2); Shurin, A. T.; Schlieper, C.; Romanova, N. N.; Reish, D. J. (2); Reineck, H. E.; Pérès, J. M. & Picard, J. (1); Pérès, J. M. (1); Pérès, J. M. (1); Pérès, J. M. (1); Nesik, K. N.; Mokryevski, O. B. (1); Mokryevsky, O. B. (2); Makkaveeva, E. B.; Lillelund, K. (2); Laborel, J.; Knox, G. A.; Kaneva-Abadjieva, V. & Marinov, T. M.; Jones, M. L.; Hunkins, K. L.; Ewing, M.; Heezen, B. C. & Menzies, R. J.; Gurjanova, E. F.; Lin, J. Y., Scarlato, O. A., Uschakov, P. V., Bao-Lin, Y. & Chung-Yen, J.; Ellis, D. V.; Eales, M. B.; Carpine, C.; Cabioch, L.; Belyaev, G. M.; Balasubrahmanyam, K.; Almaça, C.

GEOGRAPHIC DISTRIBUTION

General.—Sjögren, B.

Expeditions and Voyages.—Bruun, A. F.; Simonetta, A.; Scott, P.; Hennipman, E.; Nijhoff, P.; Swennen, C.; Vader, W. J. M.; Wilde, W. J. O. de & Tulp, A. S.; Luling, K. H.

PALAEARCTIC REGION

British Isles.—Brough, J., Matheson, C. & Jefferson, G. T.; Richards, O. W. (2).

Italy.—Zavattari, E.

Norway.—Christiansen, B.

Sweden.—Andersson, J. S.; Curry-Lindahl, K. (1).

Mediterranean Region.—Dorst, J. (1).

AUSTRALIAN REGION

Australia.—Fischer, P. H. (2).

New Zealand.—Forster, R. R.

CENTRAL AMERICA

Guatemala.—Luna, J. J. R.

San Juan Island.—Kohlmayer, J.

NEARCTIC REGION

West Pacific.—Sakagami, F.

ANTARCTIC

Antarctica.—Novatti, R.

SOUTH AMERICA

Chile.—Mann, F. G.

Tristan da Cunha.—Cragg, J. B. & Anthony, H. D.

PALEONTOLOGY AND GEOLOGICAL

DISTRIBUTION

General Works.—Simpson, G. G.; Nicol, D.

Eocene.—Bataller, J. R.

Jurassic.—Gussow, W. C.

Carboniferous.—Galitzkaya-Gladchenko, A. Y.; Shchukina, V. Y.

Devonian.—Volkova, A. A. & Chernova, I. A.



